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ABSTRACT

This series of thirteen reports reviewing available information on the causes and dimensions of youth employment is designed to provide an information base for policy formation. (It constitutes the first of a three-volume compendium: other volumes deal with special needs and problems of youth employment policy and with program experience --see note.) The first four articles provide an analysis, needs assessment, sequential and developmental perspective, and facts and figures on youth employment problems. Age status differentials, intervention strategies, and teenage choices about work are discussed. Other issues examined include the need for youth employment policy, the social psychology of poor youth as related to employment, and the social costs of youth employment problems. A summary of youth views solicited by twenty-five National Football League players is given in one report. The final two reports cover youth differentials to the minimum wage and costs and benefits of part-time employment of in-school youth. (MN)

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THE YOUTH EMPLOYMENT PROBLEM:
CAUSES AND DIMENSIONS

FORWARD

Youth employment is the most pressing manpower challenge facing the country today. All unemployment is wasteful, but when it is concentrated among youth, as is presently the case, it has particular human, social, and economic consequences. It implies not only a current loss of valuable resources, but also lost returns on human capital investments which will doubtless extend well into the future.

Despite the fact that the Carter Administration has put more people to work since 1976 than in any 3-year period since World War II, including the largest-scale targeted effort for youth in history, the problem of youth unemployment remains severe. A few examples highlight this fact:

- Despite a significant reduction in adult unemployment in recent years, similar gains have not been enjoyed by younger Americans.
- Young people 16 through 24 have accounted for nearly one-half of all unemployed persons in the last five years.
- Although Federal youth programs have significantly increased employment among black teens over the past 2 years, at least 400,000 minority teenagers remain unemployed.
- While the unemployment rate for white teenagers has remained constant at about 13 percent over the past 25 years, the unemployment rate for black teenagers has grown from 17 to 36 percent.

In order to address this challenge of youth unemployment, President Carter directed a full-scale review of Federal youth programs under the leadership of Vice President Walter F. Mondale. The aim was to develop youth policies for the 1980's which would make the best use of scarce resources and institutional capacities in meeting this challenge. A Vice President's Task Force on Youth Employment was created and, working closely with the White House Domestic Policy staff, it conducted a comprehensive review throughout 1979.

The review process, characterized by The New York Times as "the most exhaustive ever," had several dimensions. Fourteen Federal agencies with youth programs participated, submitting a massive array of information on universe of need, program experiences and recommendations.

Groups outside the government were involved through a range of private meetings, seminars, roundtables, but especially through a series of conferences on issues critical to the youth unemployment program - inner-city problems, the work-education connection, the problems of special needs groups, Job Corps, and the role of nonprofit and community-based groups.

Finally, the Vice President's Task Force on Youth Employment commissioned a range of academic experts and practioners to present analyses of key policy issues and program experiences.

This compendium is drawn from the submissions of the 14 Federal agencies, from the background papers utilized in the various conferences, and from the analyses developed by experts and practitioners. It is divided into three segments: First, analyses of the overall magnitude and causes of youth employment problems; second, more detailed investigations of special dimensions such as race,location, and the other barriers to employment experienced by subsegments of youth population and third, assessments of program experiences.

This compendium provides the informational base for the recommendations of the Vice President's Task Force on Youth Employment. The views are, however, those of the authors, who were consciously selected to achieve a balanced range of perspectives and expertise.

The Department of Labor's Office of Youth Programs, which provided the financial support for the Vice President's Task Force, was responsible for editing and overviewing the papers in this compendium. It is important to stress, however, that the policy review effort and the analysis process involved all Federal agencies and a multiplicity of viewpoints. In editing this evidence, care has been taken to retain this breadth of perspective.

As might be expected, the scope of the subject yields a variety of recommendations. There is not always unanimity of opinion. But the entire review process, as well as this compendium of papers, has increased the consensus that youth employment problems are serious, that current programs are useful but can be improved, and most critically that we have the resources, the knowledge, and the will to substantially eliminate youth employment problems in the 1980's.

Thomas Glynn
Director
Vice President's Task Force
on Youth Employment

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OVERVIEW

Almost everyone agrees that there is a serious youth employment problem and that something must be done. Yet, there is equally widespread agreement that we lack understanding of the causes, consequences and cures--knowledge which is necessary for effective action. As one editorial put it, we have spent $40 billion on youth employment and employability development over the last 15 years, yet the problem remains and we do not even know what works and what does not. The Youth Employment and Demonstration Projects Act (YEDPA) of 1977 reflected this ambivalence. It provided significant resources to expand employment and training opportunities for youth. Indeed, it accounted for almost all the employment growth for minority teenagers in the last two years. Yet, this was a "demonstration Act," premised on the notion that we needed to experiment and evaluate further before committing ourselves to permanent policies.

Under YEDPA, a structured battery of social experiments have been implemented to carefully test every possible intervention and approach. New data bases have been generated to learn more about youth problems and a range of research studies have been undertaken to synthesize all possible knowledge from existing information. Because of the timeframes necessary to mount such efforts and analyze the results, significant findings are only now beginning to be produced and the output will continue for years. Hence, many feel that it is still premature to move forward in the development of youth policies for the 1980s.

Without minimizing the importance of further knowledge development in order to fine-tune public policies, one might question this conventional wisdom that we lack the basis for policy formulation. There are more data available on the youth employment issue than almost any other social welfare subject. Thousands of careful experiments have been conducted on all aspects of the problem over the last decade. Evaluations and analyses can fill a fair-sized library. Compared with our understanding of other domestic issues--the problems of older persons, of family status and change, of undocumented workers, of wealth distribution, or countless other subjects--we have quite comprehensive knowledge about youth employment. There was one year in the 1960s, for instance, when the Congressional hearings on the Job Corps were more voluminous than those on the entire defense budget.

It would appear that the problem is not the volume or even quality of information on the subject of youth employment, but rather the failure to translate and synthesize this information for public policy formulation. Rather than a knowledge deficit, there is, if anything, a knowledge and information overload. The greater the inquiry into any social science area, the more complex the subject becomes, the more questions are raised, and the less satisfying the answers because they are always subject to equivocation. Youth employment is also a confoundingly interrelated subject. It does not just concern jobs. It involves education, family status, developmental patterns, and much much more. The problems of youth unemployment are intertwined with economic changes, the welfare problem, illegitimacy, drug abuse, inadequate schools, declining cities and almost every other social pathology. Any discussion tends to quickly lose focus and to be impervious to resolution because there are so many perspectives which can be and have been applied to the same information.

What do we really need to make policy? First, there must be general consensus about the size of the problem and whether, in competition with other issues, it deserves priority. Second, the resource commitments must be determined in light of these needs and current efforts. Third, the underlying approaches must be decided, but not in great detail since there must always be a multiplicity of strategies for the diverse real-life circumstances. Fourth, the target groups must be decided based on needs and, fifth, the delivery approaches must be determined based on program experience. Legislation must establish a framework in which improvements can be made and knowledge translated into action as it is learned. In other words, what is required is not extraordinarily detailed information, but rather consensus from a balanced review of the information which is already available. In the case of youth, the problem in achieving consensus is not that there is too little information but too much to absorb and integrate.

The purpose of the Vice President's Task Force on Youth Employment was to review available information, to take stock of the viewpoints and interests of a broad range of citizens and institutions, and to provide a forum for constructive interchange on the issue. The analytical activities were only one component in this consensus-building effort. Further, the analysis did not seek to plow new ground, but rather to reap the harvest which had already been sowed.

This compendium of papers represents a bountiful harvest. The first set of analyses addresses the causes and dimensions of the youth employment problem. The second set takes a more detailed look at the severe dimensions of the problem and the special needs among youth. The third set reviews the experience of employment and training as well as educational programs.

While the authors approach their subjects from a variety of perspectives, and synthesize a diverse array of other studies, it is significant that certain themes and findings are repeated. There is a good deal of consistency between the papers and their conclusions. For instance, the papers analyzing causes, consequences and dimensions tend to agree on the following:

1. The youth employment problem, as defined by almost any measure, has a gradient of severity such that many youth with statistically identified problems may have limited needs while others have very concentrated needs. Most youth suffer some period of unemployment which in most cases is not consequential. Subdividing by duration of unemployment, race, low income, poverty area residence, sex, childbearing out of wedlock and dropout status, increases the average severity of conditions of those in the defined universe of need, although it also increases the number with real need who are not included. The major variables in need definition are known, and data are available to measure the dimensions, so that need definition is really a matter of assumptions, i.e., how severe the average needs of the defined universe must be to justify action.

2. The analyses suggest that the severity gradient according to most measures is probably increasing. The severe problems are growing worse both relatively and absolutely. Racial disparities are increasing. Youth from poor families are increasingly worse off relative to those from rich families. The proportion of weeks of unemployment accounted for by long-term unemployed youth is rising.

3. The youth problem is not likely to recede without action. Slowing growth of the youth cohort will reduce competition for jobs, but there is apparently increased segmentation by race and the minority segments of the youth population will continue to grow rapidly. Educational attainment gains in the last decade have not improved the situation and are now leveling off. Increased equality for minority adults has not "trickled down" to minority youth. Private sector employment has grown rapidly in the last several years but the expansion of public programs provided most of the jobs for minority teenagers; the recession ahead looms as a depression for disadvantaged youth.

4. There is increasing evidence concerning the long-run implications of teenage joblessness. Those who work as teenagers do better as young adults. Likewise, those with training, education and labor market information, have more stable and remunerative employment as adults. Youth joblessness is related to juvenile delinquency and other pathologies.

5. The problems of young teenagers differ significantly from those of youth in their early twenties. Teen employment needs are completely different from career entry employment needs. Race is another variable. The black and Hispanic employment experience, on the average, is worlds apart from that of white youth.

6. Teenage employment problems are intimately related to schooling. If offered the opportunity, the vast majority of older teenagers will combine education and work. A substantial portion of racial employment differentials is among students rather than dropouts. Work and education coordination is more than a conceptual theme--it is a practical necessity driven by the reality of increased labor force participation among students.

7. Employment becomes an increasingly significant factor over the teen years and a major one by the twenties, but it is a less significant dimension of the life of youth than for adults. Focus on jobs, training and labor market information needs should not minimize the parallel needs for support, positive development opportunities and constructive options. In other words, jobs must be interrelated with the overall developmental process. We know much more about employment status and change than we do about the related dimensions of development.

8. There is increasing consensus that supply explanations for youth employment problems may not be as relevant as demand explanations. Those who would explain away youth unemployment, and particularly minority youth unemployment, by high turnover, volatility, seasonality of employment or lack of values are hard-pressed to support this claim for more than the tail of the severity gradient. Where jobs are available, youth fill them. Many of the alleged supply-side shortfalls such as lack of dependability or awareness of job mores are simply the cumulation of stunted past opportunities. Supply variables affect the rationing of opportunities much more than the level. In the central cities and poverty areas, the problem is not basically the inadequacy of individuals but the shortage of opportunities.

The analyses of the problems of "significant segments" of the youth population provide some major policy findings:

1. There is no simple explanation for the employment problems of minorities. Regression equations find countless explanative variables and yet still leave large portions of the differentials unexplained. The unexplained residual is frequently ascribed to discrimination. For blacks, half of the variable in teenage unemployment is unexplained. This does not mean that if two youths of equal credentials show up for a job, dressed the same way and with the same references, that the black youth has half the chance of being employed. Rather, every aspect of the experience will differ for the black--they will live where there are fewer jobs, their job finding network will be less effective, they are likely to have less experience and fewer references for that experience. Only a small proportion of employers must practice outright discrimination to magnify these differentials.

2. There are important differences between the employment problems of black and Hispanic youth, or more correctly, between blacks and Chicanos (since Puerto Rican youth more closely parallel the problems of blacks). While Hispanics are also the victims of employment discrimination, their problem is much more one of inadequate education and career entry rather than a lack of "aging vat" jobs. In practice, the problems of minorities are so serious that they call for more of everything, but the relative mix should emphasize education to a greater extent for Chicano youth.

3. The employment problems of young females receive inadequate attention. Young women with children are largely ignored by public employment and training programs until their children reach the age of 3. By every measure, female teenagers with or without children face lower probabilities of employment than males. There has been some relative improvement in the last decade, and increased labor force participation. Equity would require a greater emphasis on young women's problems.

4. Youth with employment problems are drawn disproportionally from those with social adjustment problems reflected in drug abuse and crime. The physically and mentally handicapped suffer compound problems. Their employment problems, in turn, complicate other difficulties. The relationships are not straightforward. Jobs do not eliminate crime or drug abuse, but they are certainly one necessary ingredient.

5. Central city and poverty area problems are extremely severe, although they do not "leap out" from available data. It is when multiple and long-term problems are considered, as well as those that are hidden by discouragement or compounded by social pathology, that the needs clearly emerge.

6. Addressing more severe problems costs more money. The methods for allocating scarce resources are a primary focus in the analyses of the problems of subsegments of the youth population and of areas with concentrated needs. A compelling case can be made for meeting each of the special needs, and the difficult choice is to balance this case against the needs of other youth who do not fall in designated categories. It would appear, however, that greater geographic targeting, individual targeting by race, and efforts concentrated on females, young parents, and troubled youth are needed.

The papers analyzing employment and training experiences as well as the success of educational programs are diverse but they share some basic messages:

1. Employment, training and education programs can work and probably are working better than the gainsayers claim. Increased education does pay off in the labor market. Job Corps is cost-effective as a comprehensive development program for those most in need. Employment programs produce useful social products and increased work is correlated with higher future earnings. There is diversity in performance but there are consistent elements in the successful programs.

2. No strategy works for everyone, and perhaps the biggest shortcoming is not in the institutions and what they offer but in not being able to steer individuals to the appropriate institutions and offerings in a reasonable fashion.

3. Many of the shortcomings of the programs are straightforward but ignored in seeking "panaceas." For instance, employment and training programs suffer extraordinarily from instability but we continue to fund them year-to-year. Alternative education approaches clearly make sense for a minority of youth but the resources and flexibility are not provided. We give into the pressure to spread limited resources broadly, and then decry the lack of measurable impacts. Income maintenance goals have been used as an excuse for slack worksite and training standards even though this has questionable value to youth or society. Supportive services and longer duration treatment are needed for youth with the most severe problems, but we tend to judge these efforts by the same standards applied to other programs. We continue to avoid the straightforward steps such as multi-year funding and less reliance on the income maintenance approach which would lead to improved programs.

4. The basic problem is not in identifying what works, but in replicating the positive approaches. We continue to experiment looking for answers when in fact there are many success stories and the issue should be how we can increase their incidence. Improvements are possible in most programs if the effort and resources are available. Again, the shortcomings are usually quite pedestrian and the problem is in motivating individuals and institutions rather than finding the ideal approach. Models are really most effective when they are part of a process of change which has a firm foundation.

5. Institutional cooperation is possible where the incentives are properly structured. Likewise, institutions can benefit from involvement of parents, the private sector, unions and the like as well as cross-fertilization.

The volume and diversity of these papers and their findings suggest the obvious--that youth employment is a complex subject with many dimensions, that there is no simple cause or cure, and that public policy cannot be directed with scientific precision. Yet, there is also uniformity in the conclusions: The cluster of youth employment problems is, indeed, severe. The most serious dimensions and special needs groups are identifiable. The alternative approaches have been explored and there is general consensus about what makes sense as well as improvements which can be made. In other words, there is a reasonably sound conceptual foundation for youth employment policies. Information produced by knowledge development activities under the Youth Employment and Demonstration Projects Act should provide the means to fine-tune approaches, particularly at the local level, and to better meet special needs, but they are unlikely to yield any startling findings which will supplant what is already known. The fine points can be debated forever, but basically we know what needs to be done to address the youth employment problem. It is time to move ahead based on what we know rather than continuously redefining what is unknown or unknowable. There is a problem and we understand generally how to ameliorate it. We must now build the consensus for action. This compendium of papers is an important step in that direction.

Brian Linder
Robert Taggart
Editors

AN ANALYSIS OF
YOUTH EMPLOYMENT PROBLEMS

Robert Lerman

Department of Labor

Universe of Need Estimates

It is possible to derive a variety of estimates of the universe of youth with serious employment problems. One method is to determine how many youth actively seek jobs but cannot find employment for long periods of time. A second approach is to broaden the concept to cover cases in which nonemployment, not simply unemployment, is a serious problem. A third approach is to limit the universe to youth whose serious employment problems contribute to low family income, or even poverty.

Universe I defines need in terms of the number with substantial unemployment over the year. Those who actively looked for work for 15 weeks or more but could not find a job are included in the universe. Table 1 provides a breakdown of this universe by age, race, sex, and educational attainment.

Universe II limits the number to youth who have serious employment problems and come from low income families. In addition to including low income youth with 15 or more weeks of unemployment, Universe II also includes low income youth in expected to work categories who experience 15 or more weeks of nonemployment. Table 2 presents the numbers showing the size and age-sex composition of Universe II.

Universe III moves toward a pure stock concept of jobless youth. Universe I and II cumulate all those who experience problems over the year. Universe III is the number of a given month's jobless youth who face substantial joblessness over the year. Universe III takes account of the youth who are not reported as unemployed, but who want jobs now. The key step in deriving Universe III is to determine the percentage of the currently jobless who will experience 15 weeks or more without a job over the year. An estimate of this percentage can be derived from existing data.[1]

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[1] First, tabulate the percentage of the year youth from various subgroups will be unemployed. For example, youth with 15 weeks or more unemployment will be unemployed about 60 percent of the year. Next, multiply each percentage times the relevant number in each weeks of unemployment category. For example, one would multiply .6 times the number who experience 15 weeks or more unemployment. This step yields the number of unemployed in a typical week classified by the number of weeks of unemployment over the year. Dividing the unemployed from a category by the total unemployed yields the percentage of unemployed in a particular weeks of unemployment category.

Table I
Universe of Need: I
(Numbers in thousands)

With 15+ Weeks of Unemployment in 1977

	Whites		Nonwhites		Hispanic		Total		
	16-19	20-24	16-19	20-24	16-19	20-24	16-19	20-24	Tota
Young Men									
Students	168	52	61	17	19	1	248	71	319
Nonstudents									
Did not complete High School	165	214	50	93	22	30	238	337	575
High School Graduates	122	556	13	120	7	38	143	715	858
Young Women									
Students	102	36	31	27	16	5	151	69	220
Nonstudents									
Did not complete High School	69	65	18	37	7	12	95	115	210
High School Graduates	109	356	33	157	6	23	147	536	683
Total	735	1279	206	451	77	109	1022	1843	2865

Table 2*
Universe of Need: II
Low Income Youth with Serious Unemployment or Nonemployment by School and Family Status

	Numbers in Thousands		
	16-19	20-24	Total
Young Men			
Students:			
15+ weeks of unemployment (a),(c)	57	12	69
Nonstudents:			
15+ weeks of unemployment (a)	106	267	373
15+ weeks of nonemployment (b),(c)	394	626	1020
Young Women			
Students:			
15+ weeks of unemployment (a),(c)	35	22	57
Nonstudents:			
Head or spouse with children			
15+ weeks of unemployment (a),(c)	15	60	75
Other Family Status			
15+ weeks of unemployment (a)	54	106	160
15+ weeks of nonemployment (b),(c)	420	646	1066
1. Total, only those with substantial unemployment (total a)	267	467	734
2. Total, expected to work with substantial nonemployment (total b)	814	1271	2086
3. Total, not expected to work with substantial unemployment plus expected to work with substantial nonemployment (total c)	921	1366	2287

NOTE: * Youth from families with incomes below 70 percent of the lower BLS living Standard.

Source: Tabulations from March 1978 Current Population Survey

Table 3

Universe III: Number of Current Jobless with Serious Employment Problems

	Unemployed	Discouraged Unemployed*	Total Jobless	Percent with 15+ weeks of Joblessness	Univers.
White Males					
16-19	561	479	1040	.69	718
20-24	467	264	731	.71	519
Nonwhite Males					
16-19	156	154	310	.78	242
20-24	157	28	185	.86	159
White Females					
16-19	464	589	1053	.63	663
20-24	412	307	719	.67	481
Nonwhite Females					
16-19	174	171	345	.72	248
20-24	176	196	372	.82	305
Total	2567	2188	4755	.71	3335

* Discouraged unemployed are those not in the labor force who want jobs now.

NOTE: This universe is based on data on the work experience of youth during 1977 as a whole and during the April 1979 survey week. These figures represent the universe of need in 1979 if April were the representative month.

Source: Tabulations from the March 1978 Current Population Survey and Employment and Earnings, May 1979.

Table 4

Universe IV: Job Gap* Facing Low Income and Minority Youth, by Age, Race, Sex, and Family Income, March 1978

Race, by 1977 Family Income As Percent of BLS Lower Living Standard	Job Gap in Thousands			
	Males		Females	
	16-19	20-24	16-19	20-24
White				
70% - 150%	131	105	185	195
0 - 70%	90	137	152	275
Total White	221	242	337	470
Nonwhites				
150%+	84	64	55	7
70% - 150%	90	72	126	31
0 - 70%	173	107	221	192
Total Nonwhites	347	243	402	230
Hispanic				
150%+	-	-	14	7
70% - 150%	22	7	39	29
0 - 70%	43	19	50	53
Total Hispanic	65	26	103	89
Total	633	511	842	790

* The job gap is equal to the difference between the target employment-population ratio and the subgroup's employment-population ratio, multiplied times the subgroup's population. For low income white, nonwhite, and Hispanic males and 16-19 year-old females, the target employment-population ratio is the ratio experienced by whites in the relevant age-sex category during March 1978 from families whose 1977 income was greater than 150 percent of the lower BLS living standard. For low income white, nonwhite, and Hispanic 20-24 year-old females, the targets and job gaps took account of differences in family status. For example, the target EP ratio for low income white women with children was the observed EP ratio of middle and upper income white women with children.

Source: Tabulations from the March 1978 Current Population Survey.

It turns out, as noted in Table 3, that about 70 percent of a typical week's jobless youth will experience 15 or more weeks of joblessness over the year. The estimates of Universe III are based on the number of jobless in April 1979 and the full-year employment experience in 1977.

Universe IV utilizes the job gap concept. The idea is to specify a target employment-population ratio for youth by age and sex and to measure how far youth subgroups fall short of the target ratios. The target ratios come from the experience of white youth from moderate and high income families, (these are youth whose family income exceeds 150 percent of the lower BLS living standard). Subtracting the actual ratios of low income white, or all nonwhite, and of all Hispanic youth from the target ratios yields a set of percentages representing the shares of each youth subgroup who would be expected to be employed but who are not employed. By multiplying each percentage times the relevant population, one derives the number of jobs necessary to bring employment-population ratios of low income and minority youth up to the levels attained by moderate and upper income white youth. Table 4 shows the numbers in Universe IV.

Underlying Universe I-III is the notion that the experience of nearly 4 months of unemployment or more represents a serious employment problem. Some believe that the nature of the problem facing these youth is frequent job-changing due to an inability to find or hold a good job.[1] While such job change may represent the difficulty of matching jobs to workers, it is sometimes argued that the accompanying unemployment does not represent long-term difficulties in finding work or a job shortage. To examine this issue, it is possible to tabulate those with substantial unemployment by the number of employers and by whether or not any of their unemployment occurred between jobs. While some of the group with substantial unemployment in 1977 had 2 or more employers, the majority had only one or no employers at all. The majority of those with 15 weeks or more of unemployment actually were unemployed over 26 weeks. The typical pattern of unemployment for these youth was not a short spell of job search while moving from one job to another, but rather a long spell of joblessness while trying to find even one job.

In summary, the universe of need for youth programs is large. Their employment problems and other social problems require special interventions to overcome.

Reasons for Concern

High youth unemployment has persisted in the American economy for nearly three decades. Since 1954, unemployment rates of teenagers have not fallen below 11 percent. In spite of an array of private and government efforts, youth unemployment rates have continued to rise. Unemployment rates of teenagers averaged 16.9 percent between 1970 and 1978, as compared with 14.3 percent in the 1960's and 11.4 percent in the 1950's. The ratio of youth to adult unemployment rose from 2.5 in 1954 to 3.3 in 1978. Nonwhite youth have faced the most dramatic worsening in employment prospects. Unemployment rates of non-white teenage men jumped from 19 percent in the 1955-59 period to an extraordinary 34 percent in the 1977-78 period.

The direct interpretation of these high unemployment rates is that a large share of young people spend time looking for jobs when they could be working. Their idleness represents a waste of resources to the nation and a loss of income to the young people unable to find jobs. But, some have questioned the seriousness of the problem. Their argument is that much of the unemployment is either among students looking for part-time work or among young people whose job and labor force movements make some unemployment necessary and productive.

Is the youth employment problem, then, really a serious concern? There are several reasons to consider it as such. First, the high rates of unemployment or lack of employment in the United States are not the natural outcome of frictional movements of a voluntary or necessary kind. Only a small share of total youth unemployment comes about from young people moving from job to job or from employment to out of the labor force. Most of the unemployment occurs among young people who cannot find jobs for long periods of time. Moreover, high youth unemployment is not a necessary characteristic of modern societies. Several European countries and Japan have demonstrated the capacity to maintain low youth unemployment rates.

The most important reason for concern is the extremely high and rising incidence of employment problems among low income white and nonwhite youth. As Table 5 shows, the unemployment rates of all white and nonwhite economically disadvantaged youth stood at 25.5 and 40.8 percent respectively, in March 1978. Even these terribly high rates understate the number of low income and nonwhite youth who want but cannot find jobs since some have become discouraged from looking for jobs.

Especially disturbing is the worsening of the employment situation for nonwhite youth. In 1964 nonwhite youth ages 20-24 had about the same chances for employment as did white 20-24 year olds. By 1977-78, the share of nonwhites working fell 15 percentage points below the comparable figure for whites (Table 6).

This deteriorating job situation for young blacks has disturbing implications for the overall effort to achieve racial equality. In spite of improving opportunities for blacks in educational and occupational areas, many young blacks are

TABLE 5

EMPLOYMENT STATUS OF DISADVANTAGED YOUTH, MARCH 1978, BY FAMILY INCOME STATUS IN 1977, BY AGE AND RACE

	Population (in 000's)	Employment - Population Ratio	Unemployment Rate
WHITE YOUTH			
16 - 17	1119	17.4	14.8
18 - 19	956	33.6	24.3
20 - 21	963	36.5	25.7
22 - 24	1304	36.1	27.3
TOTAL OR AVERAGE:	4342	31.0	25.5
NONWHITE YOUTH			
16 - 17	633	7.7	31.1
18 - 19	539	15.7	41.4
20 - 21	437	20.8	43.7
22 - 24	565	24.5	41.3
TOTAL OR AVERAGE	2174	16.7	40.8

TABLE 6

Employment/Population Ratios for Male Youth 1955-78

	Males 16-19		Males · 20-24		
Years	White	Nonwhite	White	Nonwhite	Adult Male Unemployment Rate
1955-59	50.8	47.5	80.1	67.4	3.8
1960-64	46.0	40.4	79.5	76.7	4.1
1965-69	49.7	39.5	79.8	79.8	2.0
1970-74	51.8	33.2	77.9	70.3	3.0
1975-76	51.1	27.4	75.5	61.3	5.3
1977	54.5	27.4	78.7	61.2	4.3
1978	56.3	29.8	76.0	61.1	3.4

Employmment/Population Ratios for Females Youth 1955-78

	Females 16-19		Females 20-24		
Years	White	Nonwhite	White	Nonwhite	Adult Male Unemployment Rate
1955-59	36.9	25.2	43.0	40.1	3.8
1960-64	33.9	22.8	43.6	40.7	4.1
1965-69	37.3	23.5	49.7	49.1	2.0
1970-74	41.5	21.4	55.3	47.4	3.0
1975-76	43.5	21.2	58.7	44.5	5.3
1977	46.0	20.2	61.4	45.4	4.3
1978	48.7	23.5	60.6	45.4	3.4

Source: Employment and Training Report of the President, 1978.

skeptical that adequate job preparation will yield reasonable rewards. The extraordinarily high unemployment rates they face while young reinforces their belief that their hard work will result in little payoff in the job market. Unless the job situation improves for young blacks, widespread racial inequality may become self-perpetuating.

While jobs have been more accessible to white than to nonwhite youth, the unemployment rates of white youth have also increased over time. Of special concern is the decline in the share of out-of-school young men who are working. This group has experienced a rise in unemployment rates both in absolute terms and in relation to the unemployment of adult men.

In addition to the direct effects of unemployment on resources and incomes, high unemployment can have a negative impact on the social behavior of youth and on their long-term job prospects. This is particularly true for nonwhite, low income, and inner-city youth. Poor experience in the labor market can interact with other forces to push young people into crime, into unstable family relationships and/or into an alienation and withdrawal from the regular labor market. The absence of available productive outlets in the labor market can be particularly critical at this early stage of life. Once having committed a serious crime, once having become a parent with no means of supporting a child, or once having a long period outside a regular job, individuals must overcome special barriers to enter useful careers and to maintain stable employment.[2]

Although causality is difficult to establish, the worsening youth employment prospects have coincided with worsening trends in criminal activity, in illegitimacy, in suicides, and in welfare dependency. Furthermore, evidence is accumulating that the inability to find stable work while young affects one's employment and wages in the future.[3]

It may be argued that the decline in the youth population coming in the 1980's will allow many of the youth problems to wither away. However, while the declining population will likely reduce the absolute scale of the problem, there is no clear evidence that the percentage of youth experiencing serious problems will go down because of the declining numbers of youth. Indeed, since the incidence of serious problems is particularly high among young blacks and since blacks will make up an increasing share of youth, the proportion of problem youth actually rises.

Unique Dimensions of Youth Unemployment

Normal experiences of youth can naturally lead to employment patterns that differ from those of adults. Many young workers are students who work part-time during the school year and can only work full-time during the summer. The combining of school and work can lead to high unemployment because part-time, part-year jobs are limited, because frequent movements into the labor force require some minimal period of job search and because young workers cannot or do not want to gain seniority on jobs available in their years as students. After completing school, youth would be expected to experience another spell of unemployment as they try to locate their first full-time job.

The school-work linkage has complex implications for the employment of young people. To some extent, school and work are substitutes. Young people staying in school are giving up current income to improve their future earnings prospects. From this standpoint, low youth employment is not a social problem. On the other hand, school and work are increasingly complementary. Many students want to work part-time while going to school; some low income students need the earnings from part-time jobs to stay in school.

The share of youth enrolled in school declines sharply between the 16-17 and the 22-24 age categories. As of October 1977, 90 percent of 16-17 year-olds but less than 20 percent of 22-24 year-olds were students (Table 7). The share combining both school and work declines more gradually since older students tend to work more than younger students. The seasonal nature of youth labor force participation declines with age.

Family status is another explanation of differences between youth and adult employment patterns. The vast majority of young people live with parents who are primarily responsible for their support. The limited financial responsibilities of youth can account for their less stable work attachments and less intensive efforts to search for jobs. To many unmarried youth, the job will often be less important than one's social life.

Financial responsibility increases with age (Table 8). Among young men, about 90 percent of 16-17 year-olds but only 40 percent of 22-24 year-olds live with parents; 60 percent of 22-24 year-olds are either independent (other family status) or have dependents.

Short tenure on specific jobs and limited work experience are other natural explanations for employment differences between youth and adults. Because youth have participated only a short time in the labor market, they have been unable to build up the seniority and specific training that often accompanies job tenure. Job tenure rises with age (Table 9). This lack of job tenure makes youth more subject to layoff and subsequent unemployment. The effort to find the job at which tenure is desirable leads to job shopping and frictional unemployment. In spite of the accompanying unemployment, job shopping can be productive not only as a way for youth to find out which careers are most appropriate, but also as a way of gaining job experience and skills.

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Table 7

Enrollment and Employment Characteristics of Youth by Age and Sex

Sex and Age	Percent of Population Enrolled in School	Percent of Population Enrolled in School and working
Male		
16-17	90.4	34.7
18-19	51.3	20.8
20-21	21.3	12.6
Female		
16-17	88.5	28.5
18-19	47.9	18.6
20-21	33.2	14.5
22-24	15.4	9.4

Summer Employment - Annual Employment Ratios by Age and Sex

Age	Males	Females	Total
16-17	1.28	1.23	1.26
18-19	1.16	1.14	1.15
20-24	1.06	1.04	1.05
25-34	1.00	.97	.99

Ratio is computed at follows:

$$\frac{\text{Average number of people employed in June, July, August}}{\text{Average number of people employed annually}}$$

TABLE 8

Family Status of Young Women by Age and Race: March 1978

Percent by	WHITE				NONWHITE			
Family Status:	16-17	18-19	20-21	22-24	16-17	18-19	20-21	22-24
INDEPENDENT Youth (total)	6.6	27.8	54.1	79.4	5.2	22.3	42.5	70.1
- Head of Family with children	0.3	1.4	3.5	4.6	1.4	6.0	13.2	24.9
- Wife with children	2.1	7.7	16.9	32.5	0.9	7.0	9.4	21.9
- Married, Spouse Present, no children	1.9	9.9	18.8	23.4	0.9	2.6	5.9	6.9
- Other Family Status	2.3	8.8	14.9	18.9	2.0	6.7	14.0	16.4
DEPENDENT Youth (total)	93.4	72.2	45.9	20.5	94.8	77.7	57.5	29.9
- Child or other Relative of Head in Two-Parent Family	76.2	58.9	36.5	15.6	45.6	42.7	29.7	15.5
- Child or other Relative of Head in one-Parent Family	17.2	13.3	9.4	5.0	49.2	35.0	27.8	14.4
TOTAL	100	100	100	100	100	100	100	100
Population	3454	3534	3525	4962	654	646	630	672

TABLE 8 (continued)

Family Status of Young Men by Age and Race: March 1978

PERCENT BY FAMILY STATUS:	WHITE 16-17	18-19	20-21	22-24	NONWHITE 16-17	18-19	20-21	22-24
INDEPENDENT YOUTH (total)	2.0	9.8	32.4	62.4	0.3	4.8	17.9	48.4
- Head of Family with children	0.2	2.5	8.7	21.5	-	0.7	5.8	19.9
- Married, Spouse Present, no children	0.8	3.1	10.5	20.8	-	0.7	5.3	7.6
- Other Family Status	1.0	4.2	13.2	20.1	0.3	3.4	6.8	20.9
DEPENDENT YOUTH (total)	98.0	90.2	67.6	37.6	99.7	95.2	82.1	51.6
- Child or other Relative of Head in Two-Parent Family	82.0	74.8	55.2	29.2	57.1	53.4	49.7	30.8
- Child or other Relative of Head in Singe Parent Family	16.0	15.4	12.4	8.4	42.6	41.8	32.4	20.8
TOTAL	100	100	100	100	100	100	100	100
POPULATION (in 000's)	3571	3383	3361	4747	651	562	531	692

TABLE 9

Duration on Current Job by Age and Sex
January 1973

Males	Median Years on Current Jobs
Total, 16 years and older	
16 - 17 years	.6
18 - 19 years	.6
20 - 24 years	1.2
25 - 29 years	2.5
30 - 34 years	4.2
Females	
Total, 16 years and older	
16 - 17 years	.6
18 - 19 years	.6
20 - 24 years	1.2
25 - 29 years	2.0
30 - 34 years	2.4

In some instances, youth activities might be expected to lead to lower unemployment rates than adults experience. When job opportunities are poor, youth tend to extend their schooling. Unless these youth try to combine work and school, the limited job opportunities can be offset by declines in the labor force and result in fewer full-time unemployed workers. The all volunteer army is another outlet, expecially for young men. As job opportunities in the civilian labor market become scarce for high school dropouts, youth who might have experienced unemployment can enter the army. High school dropouts make up an increasing share of first term enlistees.

However these normal youth experiences affect employment status, it is the harmful youth experiences that lead to the most serious employment outcomes. Potential workers are expected to gain their basic educational skills while they are young. Those who do not have basic reading, writing, and math competencies by age 21 will have access to the fewest jobs and will be most likely to have chronic labor market problems. While school attendance and achievement has risen substantially over the last two decades, especially for low income and minority youth, the number without basic skills is disturbingly high.

Building up a credible work record that can yield references for future jobs is another task to have accomplished by the early 20's. Unfortunately, many young people have no work experience over an entire year even during the 20-24 year age range. In 1977, 23 percent of nonwhite men, 20-24, and 36 percent of nonwhite women, 20-24, did not work even one week. Of the unemployed nonwhite men, 20-24, in March 1978, 15 percent had never worked full-time for at least 2 consecutive weeks. Among nonwhite males, in particular, there has been an increase in the percentage neither enrolled nor employed (Table 10).

Perhaps the most harmful experience for many youth is involvement in crime. Crime is to a large extent a youth activity. Youth under age 24 account for 55 to 60 percent of all arrests in the U.S. Of all arrests for crimes of violence, 40 percent were of persons under age 21. Unfortunately, the data on the share of youth ever arrested is generally not available on a national basis. Apparently, large numbers of white and black young men have some arrests which could affect their employment. A study of the 1945 Philadelphia youth cohort indicated that about 10 percent of young white men, and 25 percent of young black men had been arrested by age 18 for a relatively serious offense.[4] The data from the Philadelphia study also showed a clear connection between juvenile and adult crime. Of juvenile offenders, 43 percent committed crimes between age 18 and 26; only 12 percent of those with no juvenile record committed a crime during the 18-26 period.

Table 10

Share of Male Population, Not Enrolled, Not Employed 1965-1978

Years	White			Nonwhite			Adult Male Unemployment Rate
	16-19	18-19	20-24	16-17	18-19	20-24	
1965-69	.9	3.0	2.4	2.0	7.4	5.6	2.0
1970-74	1.6	5.0	4.8	2.4	10.5	9.5	3.0
1975-76	2.1	7.2	7.6	3.4	14.6	12.7	5.3
1977	2.7	5.4	5.2	1.7	15.9	13.9	4.3
1978	2.4	5.8	4.4	1.6	10.0	13.3	3.4

Share of Female Population, Not Enrolled, Not Employed 1965-1978

Years	White			Nonwhite			Adult Male Unemployment Rate
	16-19	18-19	20-24	16-17	18-19	20-24	
1965-69	1.2	4.3	2.9	2.4	10.2	6.8	2.0
1970-74	1.4	5.3	3.9	1.9	10.9	9.2	3.0
1975-76	2.0	6.4	6.4	3.8	10.6	10.9	5.3
1977	1.6	5.9	5.4	1.9	14.4	13.9	4.3
1978	1.8	5.4	4.2	1.5	12.9	11.6	3.4

Young women may face special income and job market problems because they bear a child in their early teenage years. Having a child in one's early years limits a woman's ability to gain early work experience. When no father is present, the woman must usually rely on welfare. The trends in childbearing show that fertility rates of young women are falling, but fertility among unmarried women is rising. Between 1965 and 1976, there was a decline in births per 100 women, ages 15-19, from 7.0 to 5.4. At the same time, the number of births per 100 unmarried women, ages 15-19, rose from 12 to 12.5. An unfortunate result of early childbearing has been long-term dependency. Moore estimates that one-quarter of women who bear their first child in their teenage years spend time on welfare by age 27.[5]

In summary, all youth are in a transition period with respect to their social lives as well as their experiences in the labor market. While normal experiences of youth can lead to employment patterns that differ from those of adults, it is the harmful experiences affecting large numbers of youth that are likely to lead to the most serious employment problems for youth and adults.

Measuring and Interpreting Youth Employment Patterns

The process by which youth integrate into the labor market must be kept in mind when measuring and interpreting youth employment patterns. Finding the appropriate measures is one part of the problem. The unemployment rate, the key indicator of general labor market conditions, has serious limitations as a measure of youth employment opportunities. Whatever measure one uses, one has to take account of the simultaniety between school, family formation, and military experiences and youth employment outcomes. For example, early childbearing may hurt the employment prospects of young women, but poor employment opportunities could influence teenage girls to bear children.

The key conceptual limitation of the unemployment rate (UR) arises because of the difficulty in measuring youth attachment to the labor force. The UR may overstate or understate the severity of the youth employment problem. The understatement results from the "discouraged worker" phenomenon. Some youth who are not working are reported as not in the labor force (NILF) in spite of their desire to take a job now. These youth, who may have stopped actively seeking jobs because they believe no jobs are available, are classified as discouraged workers. The evidence that many youth classified as NILF are willing to work is actual work patterns. As the labor market improves, thereby increasing the number of available jobs, many youth previously outside the labor force move into jobs.

The often tenuous distinction between UR and NILF creates difficulties for comparing youth subgroups, for examining over time, and for setting appropriate targets.[6] A good example is the recent change in the employment status of black youth. Between April 1977 and April 1979, the unemployment rate of black men, 16-21, fell only 4.3 points from 30.6 to 26.3. This change masked the larger improvement in job opportunities indicated by the growth in the employment/population ratio from 29.8 to 36.5. If the percentage of young black men who participate in the labor force had not increased over the 1977-79 period, the unemployment rate would have fallen from 31 to about 15 percent.

A second problem with relying solely on the unemployment rate is that it gives all unemployed workers the same weight. In fact, unemployed workers differ substantially in the hours of lost work effort, in the amount of lost wages, in the need for income by the worker's family unit, and in the extent to which unemployment represents some minimum necessary amount of job search.

Comparing the unemployment of 16-17 year-old males with the unemployment of 25-34 year-old males provides a good illustration of why attaching the same weight to all unemployed workers is inappropriate. Nearly all the unemployed 16-17 year-olds are in-school looking for part-time work while nearly all unemployed 25-34 year-olds are looking for full-time jobs. Over 90 percent of 16-17 year-olds live with their parents while over 80 percent of unemployed 25-34 year-olds have to support themselves. The share of the unemployed looking for work for 15 weeks or more was 10 percent among 16-17 year-olds and 27 percent among 25-34 year-olds.

Still another indicator of the seriousness of unemployment is the amount of time unemployed workers spend looking for jobs.[7] Bowers reports data from a special January 1973 survey showing that only 18 percent of unemployed teenage males looked for work more than 10 hours per week; in contrast,   percent of unemployed adult men spent over 10 hours in active job search.

Given the differences between youth and adults and among youth subgroups in labor force attachment, it is important to look beyond the unemployment rate to assess the severity of labor market problems. No number can capture the employment situation for young workers, but a variety of measures can provide a good description. The employment-population ratio shows the share of the youth population in jobs. The problem is to ascertain the number who want but cannot find jobs. This number can be derived by adding the unemployed plus the discouraged unemployed. Finally, one needs to look at the hours of lost employment and duration of unemployment to make comparisons concerning the seriousness of youth unemployment.

Another difficulty in interpreting youth employment statistics arises because different surveys apparently yield different numbers of employed and unemployed youth. In addition to the monthly CPS surveys, there are several sources of youth employment data broadly representative of the nation as a whole. Each March, the Census conducts a work experience survey in which interviewers ask about weeks of employment and unemployment, total earnings, and usual hours worked per week over the entire prior year. Beginning in 1966, the Labor Department contracted with the Census to conduct the National Longitudinal Survey (NLS), a representative sample of young men and women. The NLS differed from the CPS primarily in its effort to follow the same youth through their young adult years. Additional distinctions were that the NLS questionnaires were more lengthy than the CPS and that the NLS respondent to questions about youth labor market experience was the youth himself, while the CPS respondent to questions about youth is more often the youth's mother.

The Department of Health, Education, and Welfare (DHEW) sponsored another nationally representative longitudinal survey of a subset of youth. The HEW survey, NLS72, was a sample of youth who were high school seniors in Spring 1972. The youth were drawn from a sample of high schools. The NLS72 differs from the CPS in its sample selection process, its use of mail questionnaires, its actual questions, and its greater use of the youth as respondent.

The National Crime Survey (NCS) is another nationally representative survey including data on youth employment status. The NCS is a monthly survey of 14,000 households. Census interviewers conduct the survey and Census field staff draw the sample using methods similar to the CPS selection process. Although the primary purpose of the NCS is to collect victimization data, the first set of questions to each respondent concerns his or her labor force activity. The key differences between NCS and CPS are in the totation pattern, in the training of interviewers, and in the respondents. Nearly all data on youth from the NCS comes from asking youth.

To summarize, data on youth employment status are available from the CPS, NLS, NLS72, and the NCS. Of these four sources, only the CPS relies on respondents other than the youth for much of the data on youth employment status. How do the results across surveys differ?

The most extensive comparisons have been made betwen the NLS and CPS (Appendix Tables 1-4). Freeman and Medoff performed[8] several detailed comparisons of employment status by subgroup. Several findings are notable. First, the NLS consistently shows higher labor force participation than does the CPS. The differences in participation are particularly high for youth in school. Second, the EP ratios from the NLS are much higher than EP ratios from the CPS. The NLS-CPS differences are most striking for young blacks. Among males, age 18-19, the NLS shows almost no difference by race in EP ratios for the relevant months in 1967, 1968, and 1969 while the CPS indicates much higher EP ratios for whites than for blacks. Third, the unemployment rates are sometimes higher in the CPS and sometimes higher in the NLS. In general, the UR's of white males are consistently higher in the NLS while the UR's of black males are often lower in the NLS. On the key issue of the racial differences in employment status, the NLS data show much smaller differences than appear in the CPS data.

The comparisons between NLS72 and CPS data cover only the October 1972 employment status of youth who graduated high school in mid-1972. Analysis by Meyer and Wise indicate that racial differentials are much larger in the CPS data than in the NLS72 data.[9] While comparisons for years beyond 1972 are unavailable at this time, the pattern of relatively small racial differences persists through 1976. It is also noteworthy that employment experience of both white and nonwhite recent graduates looks better according to NLS72 data than according to comparable data from the CPS.

Less complete but more recent figures are available from 1977 NCS data. The EP ratios for nonwhite males are significantly higher in the NCS than in the CPS for almost each queater and age subgroup. The differences are much smaller among young women. In spite of the NCS-CPS differences, sizable racial differentials in employment status remain in the NCS data.

Cases of Youth Employment Patterns

Isolating the causes of youth employment patterns is a difficult and complex task, yet it is necessary to design effective employment and training strategies for youth. There are several underlying policy related questions:

1. Why is youth unemployment so high relative to adult unemployment?

Unemployment rates of youth people are considerably higher than adult unemployment rates in all Western countries. In 1976, the ratio of youth relative to adult unemployment rates ranged from 1.6 and 1.7 in Japan and Germany to 9.0 in Italy. In the United States, unemployment rates of 16-24 year-olds averaged about 2.5 times the adult unemployment rate over the 1970's.

Explanations of the differences between youth and adult unemployment fall into two main categories. One has to do with the idea that young workers are less attractive to employers than adult workers because they lack experience, good work attitudes, skills, and stability. The second relies on the notion that youth unemployment is a natural outcome of high turnover, seasonality, and the transition between school and work.

A simple mechanism can account for effects of high turnover and less than full-year participation. The average young person, age 16 to 19 spends about 30 weeks per year in the labor force. Each year he or she finds a new job or return to an existing job. Suppose job search or job recall takes some minimum amount of time. Then, if young workers were to want only 25 weeks of employment and the minimum time to locate a job were 5 weeks, the average youth would be unemployed 5 out of 30 weeks, for an average unemployment rate of 16.6 percent. This high unemployment rate would not represent a serious employment problem. Rather, it would be the natural outcome of some minimum time for job search and the part-year commitment to the labor force.

According to this explanation, adult unemployment rates are low because adults are able to remain on their jobs for long periods. Because few adults separate from their jobs voluntarily and because adults are able to remain on some subsequent job for a long period, the job search time would generally make up a smaller proportion of total time in the labor force. For example, suppose that half of all adults separated from their jobs per year and took 5 weeks to find a new job. The adult unemployment rate would then be 4.8 percent.

Evidence for the turnover explanation in the United States comes from several sources. First, youth unemployment is said to be relatively short-term. In April 1979, for example, only 18 percent of unemployed 16-21 year-olds had been looking for work for 15 weeks or more, as compared to 41 percent of unemployed men, 35-44. Over half the unemployed 16-21 year-olds had been unemployed 5 weeks or less. Second, while most unemployed teenagers are classified as entrants or reentrants to the labor force, most unemployed adults have lost or quit their prior job. In April 1979, about 70 percent of unemployed teenagers but only 20 percent of unemployed males, 20 and over, had recently entered the labor force. Third, over the course of the year, young workers tend to average more but shorter spells of unemployment than do adult workers. Finally, gross flow data indicate that young workers entering the labor force find jobs in the month they enter as frequently as do adult entrants to the labor force.

These pieces of evidence lend support but do not prove the validity of the turnover explanation. A direct examination of the turnover explanation must rely on data on employment and unemployment experience over at least a full year period. The March 1978 Work Experience Survey, which covers 1977, provides the latest information available on a full year's employment experiences of youth and adults.

Table 11

Distribution of 1977 Employment and Unemployment Experience

	White 16-19	Men 20-24	Nonwhite 16-19	Men 20-24	White 16-19	Women 20-24	Nonwhite 16-19	Women 20-24
1977 Labor Force . . (in 000's)	5329	7664	595	1031	4779	6891	595	1088
Percent distribution of Labor force:								
Worked in 1977	96.3	98.6	85.4	91.1	94.7	97.3	82.1	87.8
No unemployment	70.3	67.8	54.4	59.6	72.6	75.2	53.9	55.4
1-4 weeks of unemployment	8.9	7.0	8.1	6.1	9.3	8.5	11.9	7.9
5-14 weeks of unemployment	8.8	11.0	9.3	9.6	7.7	7.2	7.1	7.9
15+ weeks of unemployment	8.4	10.9	13.7	15.8	5.2	6.4	7.1	15.5
Did not work in 1977	3.7	1.4	14.6	8.9	5.3	2.7	17.9	12.2
1-14 weeks of unemployment	2.6	.6	9.6	1.9	4.0	1.9	12.9	7.1
15+ weeks of unemployment	1.1	.8	5.0	6.9	1.3	.8	5.1	5.0
Percent distribution of employment:								
No unemployment	77.6	77.3	71.4	75.7	81.2	82.6	69.9	75.6
1-4 weeks of unemployment	8.1	6.4	8.2	5.6	7.8	7.3	13.4	6.7
5-14 weeks of unemployment	8.3	9.8	9.7	9.2	7.3	6.3	8.6	7.1
15+ weeks of unemployment	6.0	6.5	10.7	9.5	3.7	3.8	8.1	10.6
Percent distribution of unemployment:								
Worked in 1977	87.7	91.8	65.3	65.9	79.3	87.8	60.9	69.5
No unemployment	.0	.0	.0	.0	.0	.0	.0	.0
1-4 weeks of unemployment	6.4	4.8	2.7	2.0	7.9	7.8	5.7	3.1
5-14 weeks of unemployment	20.5	23.2	10.5	10.9	23.0	22.1	10.8	10.5
15+weeks of unemployment	59.8	63.9	52.5	52.9	48.3	58.0	44.4	55.9
Did not work in 1977	13.3	8.2	34.7	34.1	20.7	12.2	39.1	30.5
1-14 weeks of unemployment	3.8	1.0	8.5	1.5	6.5	3.6	11.9	5.1
15+ weeks of unemployment	9.5	7.1	26.2	32.7	14.2	8.5	27.2	25.4

A look at the employment record for 1977 is enough to suggest that high turnover plays only a limited role in explaining high youth unemployment. Tables 17 and 18 array the 1977 data. Several facts which appear to diverge from the turnover picture are notable. The vast majority of young workers do not spend any time unemployed. Even among nonwhite teenagers, the group that suffers by far the highest unemployment rates, most workers did not experience a single week of unemployment. On the other hand, about three-quarters of weeks of employment were worked by nonwhite and white youth with no unemployment at all over the year (Table 11).

The distribution of youth unemployment is highly unequal. Between 70 and 80 percent of the weeks of unemployment were borne by young workers with 15 weeks or more of unemployment. The average number of weeks of unemployment for this group was about 30 weeks. Many of these long-term unemployed did not work at all during 1977. Among black males, 16-24, those unable to find any job accounted for one-third of total weeks of unemployment. These nonworkers averaged over 20 weeks of unemployment.

The concentration of unemployment is almost as high among youth as among adult workers. In the case of white workers, about 68 percent of youth unemployment and about 73 percent of adult unemployment was borne by workers with 15 weeks or more of unemployment over the year. Among nonwhites, those with substantial unemployment experienced 81 percent of youth unemployment and 83 percent of adult unemployment.

Although the actual distributions of youth unemployment are highly unequal and inconsistent with the turnover explanation of high youth unemployment, it is worthwhile to remember that an unequal distribution of unemployment would result even if high turnover generated the unemployment. One way to determine the extent of inequality in unemployment generated by a high turnover process is to build a simple model of the economy. Consider a model in which some workers leave their job every week, thereby opening up vacancies filled during the same week. Each week's pool of jobseekers is made up of those not placed in jobs the prior week plus those whose jobs ended in the current week. Suppose all jobseekers have an equal chance of finding a job. The probability of a job seeker finding a job would be equal to the number of vacancies divided by the number of jobseekers. Given an unemployment rate and the duration of time a worker stays on the job once he or she finds one, it is possible to run the model economy over a full year to determine the distribution of unemployment. The model could illustrate the pure effects of high turnover, if one assumed short job durations and constant movements by workers into and out of jobs.

Several tests of the model were performed with alternative job durations and unemployment rates. In one example, where jobs lasted only 13 weeks and the unemployment rate was 20 percent, the share of unemployment accounted for by those unemployed 15 weeks or more was 32 percent. This figure is much lower than the 70 to 80 percent appearing in the actual data on the share of unemployment borne by long duration unemployed.

While turnover may not account for most of the high youth unemployment, it is still true that high turnover is an important characteristic of the youth labor market. Jobs turn over especially fast. In the first quarter of 1974, the new hire rates (new hires divided by those working at the beginning of the quarter) were .95 for black 16-19 year-olds, .71 for white 16-19 year-olds but only .18 for adults, 25-44.[10] Over the year, young workers find jobs with more than one employer more often than do adult workers. In 1977, about 32 percent of 16-24 year-old males but only 23 percent of 25-44 year-old males worked for more than one employer. It is noteworthy that 20-24 year-old males, who more often had two or more jobs than 16-19 year-olds, also experience lower unemployment rates than did 16-19 year-old males.

High youth turnover would be expected to exert its most significant impact on unemployment during the summer, when youth flows into the labor force are largest. The full-time labor force doubles every summer. The total labor force of 16-17 year-old males is almost 30 percent higher during the summer months than during the year as a whole. Nevertheless, unemployment rates of young people are actually lower during the summer.[11] Nearly 90 percent of the summer inflow of young workers is absorbed into jobs the month of entry into the labor force. A pure turnover explanation would seem inadequate as an explanation of this rapid absorption of young workers planning to stay in jobs only for a short period.

Although the importance of turnover is often exaggerated, the data suggest that high youth turnover makes some contribution to high youth unemployment. Workers who change jobs are more likely to become unemployed than workers who remain with one employer. Since more youth than adults work for 2 or more employers, youth would be expected to show higher unemployment on that basis alone. Workers who remain in the labor force the entire year show a somewhat lower unemployment rate than part-year workers. Thus, the more frequent part-year participation of youth would be expected to contribute to higher unemployment rates among young than among older workers.

To obtain some summary measures of the contribution of turnover to the youth-adult unemployment differential, it is possible to distinguish between differences in the incidence of unemployment and the duration of unemployment. In general, while more youth than adult workers experience unemployment over the year, the duration of unemployment is somewhat smaller among youth than among adult unemployed. These facts have led some analysts to conclude that it is high turnover that accounts for the gap between youth and adult unemployment rates.

This conclusion is misleading. To see why, consider how much of the youth-adult unemployment differential would be eliminated if the excessively high incidence of youth unemployment due to necessary short duration unemployment did not exist. In 1977, 13.5 percent of 25-44 year-old and 30 percent of 16-19 year-old white males experienced unemployment. Suppose the incidence of unemployment among 16-19 year-olds fell to the 13.5 percent adults experienced in such a way as to eliminate unemployment among young workers with the shortest amount of unemployment. In this way, the incidence of unemployment of teenagers and adults would be the same; the excessive incidence of youth unemployment due to natural turnover would no longer exist. It turns our that 70 percent of the gap between youth and adult unemployment rates would remain. Thus, high turnover can account for less than one-third of the youth-adult gap in unemployment rates.

Other explanations of the youth-adult unemployment differential emphasize the differences in characteristics between young and older workers. Because youth have not completed their education, have little work experience, and have few specific job skills, firms tend to prefer adult workers over youth. In addition differences in their attractiveness to employers, young and older workers differ in their intensity of job search. Since the majority of youth are dependents living with their parents, more youth than adults can afford a casual approach to the labor market.

The explanation that young workers are less attractive to employers than older workers cannot by itself account for high youth unemployment rates. The reason is that, while young workers may be less productive than older workers, youth wages are far less than adult wages. Thus, a less productive young worker could well be as profitable to hire as a more productive adult worker. As of May 1978, the average wage rate paid to 16-17 year-old men was only about half the average wage paid to men, 25 and over. If the labor market functioned as a perfectly competitive market, young workers would face lower wages but not necessarily higher unemployment because of their limited work experience and skills.

It is the interaction of wage rigidities along with the limited attractiveness of young workers that can lead to high youth unemployment. The minimum wage law, union power, and social attitudes place a floor under the wages employers can pay. For more attractive and productive workers, these wage floors do not limit job opportunities because they are below the wage that would prevail in a free market. For less attractive workers like youth, legal and social minimum wages do tend to lower the demand for low wage workers and push such workers into uncovered jobs, into unemployment, or out of the labor force. Average wages paid to youth are much closer to the Federal minimum wage than are the wages paid to adults. In 1978, the Federal minimum wage was virtually equal to average wage rates paid to 16-19 year-old women and 88 percent of average wages of 16-19 year-old men, but less than 50 percent of average wages of adult workers.

The legal minimum wage differs from other forms of wage setting within sectors in terms of its coverage. From 1956 to 1979, the legal minimum wage had declined relative to average wages in manufacturing from 52.9 percent to 49.7 percent. However, the share of private, nonsupervisory, nonagricultural jobs covered by the legal minimum jumped from 53 percent to 84 percent. This means that only 16 percent of relevant jobs are left uncovered by the legal minimum. In fact, the legal minimum is less comprehensive because of the considerable noncompliance by covered employers. Estimates indicate that perhaps as many as 30 percent of covered jobs paying near the minimum actually pay under the legal minimum.[12]

Economists have performed a number of studies of the impact of the minimum wage. These studies have been subject to a number of limitations. Some have failed to account for an uncovered sector; some have assumed away unemployment in the covered sector; most have been unable to include information on changes in state minimum wages and none have successfully taken account of employer noncompliance with the legal minimum. Nevertheless several of the studies are valuable additions to our knowledge.[13] Nearly all the studies show that the legal minimum does induce disemployment effects and that these effects are most pronounced for young workers.

In a comprehensive study, Gramlich found that high minimum wages reduce full-time employment of teenagers substantially and force many into part-time employment.[14] The net result is a small decrease in the number employed but a larger decrease in total lost hours of work. The author takes account of the increases in wages paid to young workers who do find jobs. His results indicate that the wage gain comes close to offsetting the job loss in the aggregate, but that many young workers from high income families benefit while many young workers from low income families lose. Using Gramlich's techniques, a Labor Department analyst estimated that the 1979 minimum wage increase cost teenagers about 90,000 jobs, or a 1 percentage point rise in their unemployment rate.

Other studies show sizable effects of the minimum wage on youth employment and unemployment. Ragan estimated that the total job loss of teenagers in 1972 resulting from 1966 changes which vastly expanded coverage was about 225,000 jobs.[15] This job loss translated into an unemployment rate that was 3 percentage points higher for black youth and almost 4 percentage points higher among white youth.

Freeman used his study of differences across areas to assess how youth might be affected by the minimum wage.[16] The idea is that while the Federal minimum is the same in all areas, average wages differ by area. Where average area wages are low, the Federal minimum will constitute an effective barrier to the hiring of young people. Where area wages are high, fewer jobs would have paid below the minimum even in the absence of a law. Freeman found that employment was lower in area with lower average wage rates, but that unemployment rates were not affected. This test provides more evidence that the minimum wage affects youth employment. However, the test may confound other wage rigidity effects with the minimum wage effects. These other wage rigidities might raise average area wages and might cause firms to shift away from young workers in favor of older workers.

Given that wages are somewhat rigid doward, the factors that make young workers less attractive to employers can end up limiting their job opportunities. In general, young workers are less attractive because of characteristics associated with age. However, child labor laws and privately determined age entry requirements present employment barriers based on age per se. While no rigorous study of the effects of age restrictions is available, analyses by Osterman[17] and by Mitchell and Clapp[18] indicate that union and employer policies as well as child labor laws channel young workes into a narrow range of occupations. These effects could lead to overcrowding in youth occupations, which, in turn, results in lower wages and possible unemployment.

The limited range of jobs available to young workers is one reason youth tend to work in short duration, low wage jobs. The other reasons are that some youth do not want permanent jobs and that other youth are shopping for the right longterm job. For all these reasons, young workers have shorter job tenure than older workers. Once tenure on a specific job is taken into account, young workers apparently have no more chance of becoming unemployed than do older workers. Mincer and Leighton found that experience in the labor force has no impact on the incidence of unemployment other than through its effect on tenure in one's current job.[19]

Young workers face difficulties in finding permanent jobs because they lack work experience. In a survey of firms employing low to medium skill workers, Diamond and Bedrosian found that the majority of firms regarded work experience as a preferred characteristic of workers.[20] In several cases, firms wanted workers with experience in the same or a related job. Osterman found that some young workers are able to obtain such experience by working in "bridge jobs", which are jobs in small firms that offer the experience and references necessary for young workers to move into permanent jobs with large, high paying firms. Unfortunately, many young workers have little or no access to bridge jobs and thus have special difficulties in gaining the work experience desired by employers.

The connection between education and youth employment opportunities is complex. Young workers who have not completed their education generally work in temporary, part-time, and low wage jobs. In May 1978 among 16-19 year-old male workers who did not complete high school, students worked an average of 15 hours per week at jobs averaging $2.35 per hour while nonstudents worked 31 hours per week at jobs averaging $2.98 per hour. As youth enter their early 20's, high school and college graduates appear to have a significant advantage in employment and earnings over nongraduates. Among young white men, 20-24, who are out of school, high school graduates showed a .85 employment-population ratio, an 8.5 percent unemployment rate, and a $5.10 per hour wage in March 1978 while dropouts experienced a .75 employment-population ratio, a 15.4 percent unemployment rate and a $4.54 per hour wage.

Some studies have questioned the idea that added education for particular workers improves their employment status in their early years in the labor market. A National Commission on Employment Policy review of studies of youth employment cited several analyses which indicated little or no positive effect on employment from completing high school.[21] These studies generally used the National Longitudinal Survey and covered youth experiences in the late 1960's and early 1970's. Even the studies that did find positive impact from added education questioned the direction of causation. Youth who do well generally would tend to complete high school. Thus, completion of high school could be an indicator of an individual's employability rather than a necessary aid to the employment of all young people.

In spite of these studies, more recent data appears to lend support to education's positive role in the employment of young people. The employment gains sometimes show up only a few years after completion of high school. For example, among out of school nonwhite young men, dropouts had only a slightly higher unemployment rate than graduates in the 16-19 years (33.7 to 28.1), but the gap widened in the 20-24 age period (28.7 to 17.3). The HEW-sponsored survey of 1972 high school seniors (NLS72) indicated that high school graduates integrated smoothly into the labor market, even in the high unemployment years of 1975 and 1976. Unemployment rates of white and nonwhite male graduates were only 5.9 and 8.6 in the 1975-76 period.

In addition to factors affecting the attractiveness of youth to employers, there are factors affecting the labor force commitment of youth relative to adults. Differences in family obligations between young and older workers would be expected to cause differences in the need for earned income. In March 1978, the proportion of young men who headed families (with children or married without children) was 3 percent in the

16-19 age range, 30 in the 20-24 age range, and 70 in the 25-34 age range. While overall employment-population ratios rise substantially by age (from .46 to .72 to .88), family heads of all ages have high EPS slowly (.85, .83, and .91 respectively). Of course, it is difficult to determine causation. Those with access to good employment opportunities may form families at younger ages, those who form families while young may thus become more serious about finding jobs, or finally, those who are socially capable may both do well in the labor market and form families at a young age.

It is interesting to note that young men who are living with parents or are otherwise related to the family head do relatively poorly in the labor market through their late 20's and early 30's. In March 1978, 11 percent of white and 21 percent nonwhite 25-34 year-old men were living in households as children or other relatives of the family head. The whites and nonwhite young men in this family status had employment-population ratios of .77 and .61, respectively; in comparison, the employment-population ratios of independent 25-34 year-olds were .91 for white and .84 for nonwhites.

2. What accounts for the trends over time and differences across geographic areas in youth employment patterns?

Traditionaly supply and demand factors are a major determination of youth employment patterns over time. In the decade of the 1950's, the population of 14-17 year-old white youth increased by over 40 percent; black youth in this age range showed a moderate increase of just under 20 percent. The massive increases in the population of 18-24 year-olds occurred in the 1960's. The size of this youth group jumped by over 50 percent among whites and by over 60 percent among blacks. By the 1970's, increases in the population among 18-24 year-olds were moderating substantially among whites, but still rose by about 25 percent among nonwhites. Projections for the 1980's indicate a declining population of white and black 16-24 year-olds, with the decreases more sizable among whites than among blacks.

No single trend can adequately describe the long-term changes in the youth labor market. Among young men, the employment share of the population has increased moderately for whites, but decreased substantially for nonwhites. In general, white students have increased their employment-population ratios substantially while the percentage of white nonstudents in jobs has declined. As a result, the proportion of young white men in jobs or school has risen, sometimes substantially. Out-of-school 16-17 year-old white males have faced a sharp worsening in job opportunities, with unemployment rates rising from about 14 percent in the 1964-65 period to almost 30 percent in the 1977-78 period. In the case of nonwhite young men, sharp declines in the percentage employed and sharp increases in the unemployment rate have hit all age-school status groups. For example, nonstudents, 18-19, experienced reductions in their employment population ratios from about .73 in 1964-65 to about .60 in 1978.

The share of the nonwhite male population neither in school nor in jobs jumped from 5.6 to 13.3 percent among 20-24 year-olds and from 7.4 to 10.0 among 18-19 year-olds.

Counting youth in the armed forces as employed does little to change this picture for whites, but does moderate the decline somewhat for nonwhites. Among 18-19 year-old nonstudents, the gap between white and nonwhite employment-population ratios increased from 8 to 19 points between 1967 and 1978 when the armed forces are excluded; including the armed forces in employment and population figures causes the gap to widen more modestly from 10 to 14 points.

School enrollment trends differ by race and by time period. Young white men generally raised their school attendance rates during the 1950's and early 1960's, but reduced their school attendance from the late 1960's to the early 1970's. This reduction was concentrated almost entirely in the 18-21 year-old age range, where the percentage in school dropped from 51 percent in 1967 to 40 percent in 1978. Among young black men, enrollment rates went up sharply from 1950 to the mid-1960's and then levels off or increased slowly up to the late 1970's.

Young women entered the labor force in large numbers over the last few decades. Between the 1955-59 period and 1978, overall employment-population ratios jumped from .37 to .49 for white 16-19 year-olds and from .43 to .60 for white 20-24 year-olds. The employment ratios changed little for nonwhite women. The upward trends were similar for white students and nonstudents, but among nonwhite women, the student increased their employment while the nonstudents showed declines in employment.

Unemployment rates deteriorated dramatically for young nonwhite women, both students and nonstudents. In the 1955-59 period, nonwhite 16-19 year-olds and 20-24 year-olds had unemployment rates of 23 and 15 percent; by 1978, the comparable rates had reached 38 and 21 percent. This worsening occurred while the adult male unemployment rate declined slightly. Unemployment rates of young white women moved up moderately from the late 50's to the early 60's and remained about level until recently.

Young women have continued to increase their school attendance rates from the 1950's through the mid-1970's. While the largest increases occurred up through the mid-1960's, small increases in school enrollment showed up during the 1967-78 period.

To explain these trends as well as the variations in employment and school attendance across cities, Freeman and Wachter and Kim have examined the role of traditional supply and demand factors.[22] Changes in general economic conditions set off especially large changes in youth employment because young people have low job tenure, low seniority, little skill specific to the firm, and are often new entrants to the labor market. Wachter and Kim estimated the impact of aggregate demand not only on youth employment, but also on the percentage of youth who were in school full-time, unemployed, and neither in the labor force nor in school. Their findings showed that recessions tend to move youth from jobs to unemployment, to full-time schooling and out of the labor force. In other words, when times are bad, youth tend to substitute school for work as well as becoming discouraged and leaving the labor force. Black youth employment is especially sensitive to general labor market conditions. The estimates indicate that a decrease from 3.6 to 3.0 in the unemployment rate of prime age male workers would raise the employed share of black youth by about 4 percentage points and raise the employed share of white youth by about 2 percentage points.

Youth employment is also highly sensitive to differences in general employment conditions across cities. Freeman examined how variations across 115 metropolitan areas in 1970 affected youth employment.[23] He found that the variations in the demand for labor had a highly significant impact on the share of young people employed, a smaller effect on the youth unemployment rate, and a moderate effect on the percentage of youth enrolled in school. Job conditions in the local labor markets were especially important for young workers out of school.

These results show that the number of youth with labor market difficulties depends on the demand for labor as well as on the characteristics of young workers. Special problems disappear for some workers in a tight labor market. In 1967, when the prime age male unemployment rate was 1.7 percent, only 4.5 percent of 16-24 year-olds experienced 15 or more weeks of unemployment. By 1977, when the prime age male unemployment rate reached 3.5 percent, the percentage of youth bearing substantial unemployment rose to almost 11 percent.

A second focus has been on the role of the surge in the youth population. In theory, large additions to the youth labor force could have a variety of consequences. The actual effects depend on the ability of employers to utilize young workers in tasks normally performed by adult workers, on the flexibility of wages of youth relative to adult workers, and on the movements of youth between school and work. If employers cannot easily substitute youth for adults, a rise in percentage of youth in the labor force would lead to a decline in the wages of youth relative to adults. The fall in relative wages would be necessary to increase the absolute number of young people working. But, the percentage of youth in jobs might fall for one of two reasons. First, the low wages might make market jobs unattractive relative to school, house work, illicit jobs, or other activities. A second possibility is that the decline in youth wages is limited by the existence of the minimum wage and other wage rigidities. The result is that demand for workers would expand too little to accommodate the increase in the youth labor supply.

Wachter and Kim attempted to isolate the effects of population shifts between 1963 and 1978 on the percentage of youth employed, unemployed, and attending school full-time.[24] In general, the authors found that increases in the youth share of the population lowered the percentage of youth who were employed and raised the percentage who were unemployed, who were attending school while outside the labor force, and who were neither in school nor in the labor force.

Although the time series Wachter-Kim results are plausible, they are not conclusive because of the short time period involved and the difficulty in isolating the population trend from other trends. What adds credibility to the findings are similar results obtained from the analysis of differences in youth employment patterns in 1970 across metropolitan areas.[25]

These results indicate that increases in the youth population and labor force reduce job opportunities for the average young worker. Given these findings, we would expect that the labor force bulge that occurs every summer induces similar effects. But, as noted above, job opportunities for youth actually improve during the summer. A vast flow of young workers enters the labor force every summer. In 1976, for example, the full-time labor force of 16-19 year-olds jumped from 3.8 million in March to 7.0 million in June, 8.3 million in July, 7.5 million in August before falling back to about 4 million for the rest of the year. Nearly 90 percent of the increase in the youth labor force was matched with an increase in employment. The result was a decline in the unemployment rate between the spring and summer.

The ability of the economy to absorb large numbers of young people during the summer indicates the flexibility of employers to anticipated seasonal changes in the labor force. However, the bulge in the youth population may have worsened full-time, year-round opportunities for young people, while part-time and summer jobs continued to be available. One reason may be that students coming into the summer market are more employable and have lower expectations than youth in the full-year market.

Much of the success of young people in finding jobs during the summer also can be attributed to the large scale of the Federal job creation programs. Clark and Summers estimated that the average number of summer jobs provided between 1968 and 1976 was about 600,000.[26] Since about 3 million teenagers left school and entered the labor force for the summer, the Federal effort employed as many as 20 percent of all summer entrants. The share of employment that occurred because of summer programs probably exceeded 20 percent. It is difficult to estimate precisely the Federal impact because of the difficulty in determining how many youth would have obtained jobs in the absence of the Federal program.

Demand for young workers varies not only by season, but also across areas and over time. Freeman investigated the effects of differences in the industrial mix of employment across 115 metropolitan areas.[27] The idea was to see whether areas with high percentages of industries traditionally employing youth ended up with higher youth employment-population ratios than areas with low percentages of youth specific industries. Freeman found that industry mix did affect youth employment. Wachter and Kim looked at the impact of changes over time in the largest employer of youth-specific labor--the military.[28] Their results showed that the size of themilitary did indeed have significant positive effects on overall youth employment opportunities. The armed forces effect was especially significant for nonwhite men.

3. What are the cuases of the large and rising employment differentials between white and nonwhite youth and between low income and upper income youth?

The serious and worsening problems of black youth are the central concern of policymakers. Black youth have encountered unemployment rates in the 1970's that are extreme by any standard, even the standard of the Great Depression. Among nonwhites, 16-19, unemployment rates have reached the 35-40 percent range in the last few years, or well above the 20 percent rage experienced in the late 1960's. The rise in unemployment rates has extended to nonwhite 20-24 year-olds, who have seen increases from the 15 percent to the 20 percent range. Employment-population ratios, which are sometimes clearer indicators than the unemployment rate, tell a similar story. In the case of young men, blacks experienced a sharp drop in employment-population ratios, while whites showed a relatively level pattern. Young nonwhite women increased their employment-population ratio slightly while young white women made sharp advances in employment.

Low income white youth also face severe employment problems. In March 1978, white youth from families with incomes less than 70 percent of the Bureau of Labor Statistics Lower Living Standard had unemployment rates of 20-27 percent. The unemployment rates for 20-24 year-old low income white youth were about as high as for all nonwhite youth. Only 57 percent of 20-24 year-old low income white men were employed, a slightly lower share than the 61 percent registered by nonwhite men, 20-24. In the 16-19 category, low income white youth had a better employment record than all nonwhite youth.

What makes the size and worsening trend unexpected are facts showing general improvements in the employment opportunities of nonwhite workers. Among adult men, unemployment rates of nonwhites have been falling relative to unemployment rates of whites. Between the 1955-59 and the 1977-78 periods, the unemployment rate of nonwhite men, 25-34, fell from 8.3 percent more than similar unemployment rates of white men, to less than 6 percent.

Earnings of nonwhite adult women have reached virtual parity with earnings of white adult women. In the case of youth, the worsening employment situation for nonwhites has not carried over into wages. In May 1978, average wage rates of young nonwhite women were equal to those of young white women; among young men, nonwhites received wage rates about 85 percent of the wages paid to whites.

Analysts have looked at a variety of observable and unobservable phenomena to attempt to explain the sharp worsening in nonwhite youth employment.

Armed forces enrollment is one determinant of nonwhite youth employment status. However, the military's effects are subject to alternative interpretations. One interpretation is that the military is a major employer of youth and that young people in the armed forces should be counted as employed. The alternative interpretation is that entry into the army by low income and minority youth is an indication of the paucity of job options in the civilian economy; on this interpretation, counting army personnel as employed would be misleading.

Whatever interpretation one chooses, it is worth looking at the racial differentials in male youth employment with and without the military. Even including the armed forces as employed leaves a wide gap between the employment-population ratios of white and nonwhite young men. Table 12. The addition of the military to the employed pool would moderate but far from eliminate the rise in male youth unemployment rates.

Differential schooling is another possible explanation. The problem with this explanation is that the schooling gap has been narrowing at the same time as the employment gap has been widening. While, in 1978, out-of-school nonwhite youth are less likely to have graduated high school than out-of-school white youth, the schooling differential appears to account for little or none of the differential in employment and unemployment. Young nonwhite men (20-24) who graduated high school have an unemployment rate double that of young white graduates. Table 13. High school graduation does not help the employment opportunities of non-white youth, but the narrowing of the schooling gap was inadequate to avert a worsening in the employment gap.

A far more positive picture of the employment opportunities of nonwhite high school graduates emerges from the HEW NLS72 survey. A year and one-half after graduation, nonwhite young men showed an employment-population ratio only a few points below the ratio for white young men. The average EP ratio from 1973-76 was .91 for white graduates and .87 for nonwhite graduates.[29] The near equality extended to weeks worked and wage rates.

Although the NLS72 data indicate that education can close much of the white-nonwhite employment gap, the CPS data indicate that increased education can only serve a limited role. Additional evidence will be required before one can be confident about either conclusion.

Much evidence indicates that nonwhite high school graduates do markedly better than nonwhite dropouts. An analysis of employment experience in March and May 1978 indicated that high school graduation added 10 or more points to the likelihood that a nonwhite youth would be employed. The contribution of the high school degree is net of effects of age, residential location, family status, region, family income, and the number of family members. The positive results from recent data contrast somewhat with findings from other analyses indicating that increased education had little effect on nonwhites immediately after school completion. Since these other studies covered the late 1960's and only the immediate post-schooling period, the findings of a

Table 12

Employment Status of Not Enrolled Males, Including and Excluding Armed Forces (A.F.): 1967-1978

Ages 18-19

	Employment-Population Ratios				Unemployment Rates			
	White Males		Nonwhite Males		White Males		Nonwhite Males	
Year	excluding A.F.	including A.F.	excluding A.F.	including A.F.	excluding A.F.	including A.F.	excluding A.F.	including A.F.
1967	79.7	86.9	71.4	77.0	9.2	5.7	19.1	15.0
1968	84.3	86.2	69.4	74.4	7.6	5.4	20.0	16.3
1969	79.6	84.8	70.0	75.4	8.1	5.8	14.8	11.7
1970	77.7	81.9	58.1	63.4	12.6	9.9	23.2	19.5
1971	77.3	81.0	65.8	70.3	13.0	10.6	24.4	20.7
1972	81.7	84.3	63.6	68.9	10.4	8.7	21.[illegible]	18.1
1973	82.8	85.1	71.0	75.5	8.4	7.1	19.3	15.9
1974	78.3	81.1	60.8	67.8	13.2	11.3	30.3	24.2
1975	77.9	80.8	50.9	59.2	16.0	13.8	37.5	30.0
1976	77.8	90.6	42.8	52.5	14.4	12.4	43.1	33.9
1977	82.9	84.9	49.8	59.0	11.1	9.7	39.3	30.9
1978	78.5	81.1	59.8	67.5	11.9	8.5	25.5	19.7

Source: Unpublished tabulations from the October Current Population Surveys and from data on the Total Labor Force published in Employment and Earnings.

Employment Status of Not Enrolled Males, Including and Excluding Armed Forces (A.F.): 1967-1978

Ages 20-24

	Employment-Population Ratios				Unemployment Rates			
	White Males		Nonwhite Males		White Males		Nonwhite Males	
Year	excluding A.F.	including A.F.	excluding A.F.	including A.F.	excluding A.F.	including A.F.	excluding A.F.	including A.F.
1967	93.7	95.5	85.1	87.8	3.2	2.3	8.3	6.7
1968	90.8	93.7	84.8	88.2	3.7	2.5	9.3	7.1
1969	91.2	93.8	88.0	90.6	4.3	3.0	7.3	5.6
1970	81.2	90.5	77.1	81.3	8.5	6.3	14.8	11.8
1971	87.1	89.8	77.0	80.6	7.9	6.2	15.4	12.8
1972	88.0	89.9	81.3	83.9	7.8	6.6	10.2	8.6
1973	91.0	92.1	79.7	82.3	4.3	3.7	12.1	10.3
1974	89.3	90.5	78.2	81.5	6.9	6.0	14.7	12.3
1975	83.7	85.3	69.2	73.6	11.8	10.5	18.6	15.5
1976	86.3	87.6	66.8	71.7	9.7	8.8	20.8	17.3
1977	89.7	89.8	70.5	75.3	7.3	6.6	20.6	16.8
1978	89.8	90.7	72.5	76.9	6.1	5.6	18.5	15.2

Source: Unpublished tabulations from the October Current Population Surveys and from data on the total labor force published in Employment and Earnings.

Table 13

Employment Status of Out of school Youth, by age, sex, and ethnic status

March 1978

Young Men	Hispanic		Other White		Nonwhite	
	16-19	20-24	16-19	20-24	16-19	20-24
Dropouts						
Employment-Population	69.2	79.8	73.0	75.1	50.1	60.9
Unemployment Rate	21.9	15.4	15.9	15.4	33.7	28.7
High School Graduates						
Employment-Population	80.0	86.7	82.5	84.9	61.0	71.5
Unemployment Rate	10.7	8.5	10.4	8.5	28.1	17.3
Young Women						
Dropouts						
EP Ratio	32.3	31.5	47.6	39.4	23.3	32.6
Unemployment Rate	28.8	19.4	18.8	16.9	43.2	26.5
High School Graduates						
EP Ratio	60.3	62.6	74.7	70.8	43.3	62.6
Unemployment Rate	10.7	11.0	9.9	7.8	31.4	17.5

Source: Unpublished tabulations from the March 1978 Current Population Survey.

positive effect from high school graduation appear to be more reliable indicators. Employment status of nonwhite graduates continues to remain above that of dropouts through the 25-34 year-old period. In March 1978, the employment-population ratios for nonwhite men, 25-34, were .81 for high school graduates (with no college) and .73 for dropouts.

Family status differences could also result in employment differences. Young nonwhite men are less likely to have family responsibilities than are young white men. Young nonwhite women are more likely to have to care for young children than are young white women. In spite of these differences in family status, little effect could be discerned on the racial gap in the employment status of 16-19 year-old women and of young men. Family status differences do appear to play some role in explaining the racial gap in employment of 20-24 year-old women. The overall employment-population ratio of nonwhite women would be .56 instead of .50 in March 1978 had their family status distribution been the same as that of white women. This difference of 6 points represents about half of the overall gap between white and nonwhite employment-population ratios.

Considerable research indicates that women who bear children in their teenage years experience income, employment, and earnings problems that carry through their mid-20's. The effect of early childbearing on employment and income occurs through lost education, lower marital stability, and lost work experience.[30] While early childbearing appears to account for part of the racial gap in the employment of young women, causation could run from poor employment opportunities to early childbearing. Young black women may decide that, given the lack of good opportunities, early childbearing is not particularly costly.

Geographic considerations have relevance to both the worsening trend and the current problems of nonwhite youth employment. The move away from rural farm locations no doubt contributed to the declining employment of nonwhite youth from the early 1950's through the mid-1960's. In 1950, 32 percent of nonwhite males, 18-19, lived in rural farm areas, where they experienced unemployment rates under 3 percent. At the same time, unemployment rates of nonwhite males age 18 and 19, living in the cities was about 20 percent. By the late 1970's virtually no young nonwhites lived in rural farm areas. The shift from farms to the big cities no doubt helped to lower nonwhite youth employment while raising nonwhite youth wages. Although the migration of nonwhites lowered nonwhite youth employment, it apparently cannot account for the worsening gap between white and nonwhite youth.

Currently, the employment of nonwhite youth may suffer from their concentration in poverty areas of large cities. Nearly 41 percent of nonwhite youth as opposed to only 6 percent of white youth lived in poverty areas of metropolitan areas. In these areas, demand conditions are poor, as reflected in the high adult unemployment rates of 10.2 percent, as compared to a 4.5 percent in all nonpoverty areas. The high adult unemployment rates in poverty areas add to the competition youth face for even low level jobs. A representative of a large fast food company with outlets in poor central city areas as well as in the suburbs has found that adults compete for vacancies in the inner city but not in suburban areas.[31]

A comparison of employment levels of nonwhite youth by geographic area provides some indication that problems are most severe in the inner city. In March 1978, out-of-school nonwhite men, 16-19, had an employment-population ratio of .60 outside central cities, but only .36 in central cities. The figure for other nonwhite workers indicated much smaller differences. Clearly, the employment problems of nonwhite workers extend beyond central cities. In nonpoverty areas in nonmetropolitan areas, nonwhite teenagers experienced a 32.6 unemployment rate.

Another potential cause of racial differentials has to do with differences in the willingness to take and to remain at low wage or unpleasant jobs. In general, the evidence does not support the view that nonwhite youth are less willing to work at low level jobs than are white youth. Nonwhite youth do not move from job to job as often as do white youth. When asked about their lowest acceptable wage, nonwhite unemployed youth reported reservation wages near or below the wages of employed nonwhite youth.[32]

A look at quit behavior reveals evidence on both sides of the issue. On the one hand, nonwhite young men quit only slightly more often than do white young men. However, relatively more nonwhites are willing to quit at a time when no new jobs or other activity are available to replace their existing job. This type of quit behavior cannot be fully explained by differences in education, family status, age, and other personal characteristics. Osterman found that, for the 1969-70 period, the excessive number of quits into unemployment accounted for 26 percent of the racial differences in unemployment reported in the National Longitudinal Survey.[33] (It is important to recall that the NLS showed much smaller racial differentials in unemployment than does the official CPS data.)

Flanagan hypothesized that given their lower wages, it is natural for nonwhites to quit and search for other jobs more frequently than whites.[34] One would expect nonwhite jobseekers to look for jobs more intensively. The data lend little or no support to this theory. Nonwhite women earn wage rates equivalent to white women. And nonwhite men earn less but show no different job search patterns than do white men. The amount of time spent looking for work is no longer for nonwhite than for white youth.

Racial discrimination is another important explanation of racial differentials in youth employment. In general, efforts to measure the impact of racial discrimination have relied on indirect methods. Analysts attempt to control for differences in personal characteristics, such as skill, education, and place of residence, and then see whether the race of the individual has a significant effect on employment status. The race variable virtually always has a significant negative impact on employment. The review paper prepared for the National Commission on Employment Policy cites two studies indicating that about half of the difference in employment status between whites and blacks could not be explained by differences in personal characteristics.[35] Using a similar technique to explain March 1978 employment status of out-of-school 18-24 year-olds in the labor force, it was found that the race variable exerted a 9 percentage point increase in the probability of being unemployed, after taking account of age, high school graduation, family status, and place of residence.[36]

While studies documenting the significance of the race variable make a plausible case for the discrimination explanation, such results are subject to the criticism that some variables associated with personal characteristics have been omitted. For example, few studies are able to control for the quality of education or for differences in achievement. With such study with such data from the NLS72 survey showed the race variable exerting a small negative effect on weeks worked (1-1.5 weeks per year) and no effect on wage rates. However, the data covered only high school graduates and, as reported above, differed from comparable CPS numbers.

Although much evidence of racial discrimination is available from EEOC proceedings, it is difficult to translate specific instances of discrimination into an overall estimate of the effects of discrimination on current racial differentials in youth employment. The impact of changes in discrimination on changes in racial differentials is even more difficult to estimate. While racial differentials in youth employment rates have widened, suggesting a possible increase in discrimination, racial differentials in youth wage rates have narrowed. Moreover, racial differentials in the employment and earnings of young adults have apparently narrowed.

Criminal activity and arrest records may have been interacting with racial discrimination to help cause the worsening employment situation for nonwhite youth. The sharp rise in crime rates beginning in the mid-1960's did coincide with the decline in employment-population ratios of nonwhite young men. National figures on the numbers of white and black youth arrested for serious crimes are not available. However, Wolfgang found in a special study of a sample of young men living in Philadelphia that arrest records were high for white and black young men.[37] By age 22, 33 percent of whites and 61 percent of blacks had an arrest record. Of these youth, 10% of whites and 25% of blacks had been arrested before they reached age 18. Perhaps more important, 6% of white men arrested as juveniles and 15% of black men arrested at an age younger than 18 (62% of all youth arrested as juveniles) reported engaging in a high number of serious crimes as adults.

Several possible links exist between crime and employment. First, the lack of employment opportunities can push some youth into criminal activities. Second, arrest and conviction records present barriers to finding jobs, especially with private employers.

Miller reports that 15 percent of employers have unyielding barriers to employing offenders, another 75 percent consider criminal information relevant to the hiring decision.[38] Although employers show little understanding of the meaning of arrest records and in spite of the legal barriers against using arrest records, Miller reports that the majority of employers continue to use arrest and conviction records. Given the employment barriers created by arrest and conviction records, the higher level and more rapid increase in arrests of nonwhites relative to whites could have contributed to the worsening racial differentials in employment.

A third link between crime and employment could occur through racial discrimination. With limited information on an individual's criminal background, some employers may have illegally used race as a proxy for criminal behavior. Finally, young men may have increasingly resorted to illicit occupations as an alternative to regular market jobs. If this move is more pervasive among blacks, it could account for a worsening racial differential.

In spite of plausible connections between crime and employment, no analyses have documented the actual effects of these linkages. Such an analysis would have to take account of the facts that: 1) while the racial differentials worsened for black men and women, only the situation for young men could be explained by the crime variable; 2) while criminal behavior is more pervasive in large cities, the wide gap between white and black youth employment extends to areas outside central cities; and 3) if illicit occupations were attracting more young nonwhites than whites away from market jobs, one would not observe the fact that nonwhite youth are as willing to work at minimum and subminimum wages as white youth.

Another hypothesis attributes some of the poor employment experience of minority and low income youth to the incentive effects of income transfer programs. As noted above, a large share of low income youth are in families receiving income maintenance from AFDC, SSI, or food stamps. Earnings of young people can result in welfare payment reductions for the family. No studies are available to indicate whether welfare payment status affects the employment of youth. However, studies do show that employment of welfare mothers, many of whom are young, is negatively affected by the size of payments and work disincentives associated with welfare programs. West studied how young people not heading families are affected by income transfers.[39] He looked at the impact of negative income tax payments provided through the Seattle-Denver income maintenance experiments on 16-21 year-old nonheads. West found that the added income and the high tax rates associated with the experiment caused significant reductions in the work effort of young nonheads. Not only did employment fall, but involuntary unemployment rose apparently as a result of the income maintenance payments.

A related contention is that young low income women bear children early because of the existence of welfare. Studies of the relationship between the size of welfare payments and the incidence of early childbearing could not detect any independent impact from the welfare system.

In addition to the effects of welfare programs, other factors associated with family background might influence the employment problems of low income and minority youth. Since heads of low income and minority families are less likely to be employed than are other family heads, youth from disadvantaged families might have fewer direct job contacts and might acquire fewer work habits than other youth. Low educational attainment of the family head might affect the employment success of children directly or indirectly through its impact on the child's educational attainment. Finally, low family income might force youth into jobs to help support the rest of the family.

To examine these potential effects, regression analyses were performed based on data from the March 1978 CPS on male youth, 18-24, nonstudents, who were children or other relatives of the family head. The results indicated that the employment status of the family head and family income affected youth employment status in the expected direction. Youth whose family head was unemployed or outside the labor force had a 13 to 15 point lower probability of being employed than youth whose head was employed in the private sector. Those youth whose family head was self-employed did best, while youth whose family head was employed by the government did slightly worse than youth with heads in private sector jobs. The effect of low income, after holding personal and other family characteristics constant, was to raise the probability of being employed and unemployed. Lack of income clearly induced out-of-school youth to enter the labor market, raising their employment-population ratio and their unemployment rate. The head's educational status had no independent effect on the employment status of the child.

Racial differentials in the characteristics of family heads appears to explain part of the observed racial differentials in youth employment. When no information about the family head was included in a regression, the independent effect of race was to reduce the probability of employment of young men, 18-24, who were living at home by about 14 percentage points. Adding information on the educational attainment, employment status, and sex of the family head caused the independent effect of race to decline to all points. Thus, it appears that about a fifth of the racial differential in the employment probability of young men is associated with differences in the family head's characteristics.

The role of crime, early childbearing, and parent's nonemployment suggests that the worsening in the situation of black youth has been concentrated on a subset of the population. To examine the potential increase in inequality within the black youth subgroup, we first look at changes in the distribution of unemployment and nonemployment over a full year period. In any given year, the average E/P ratio can be calculated by multiplying the number of workers (those with at least one week of employment) in the population (N/P) times the weeks employed per worker as a percentage of full year work WK/52). By looking at these two components separately, we can determine how much of the decline in the black youth E/P ratio is attributable to a decline in the number of workers and how much to a decline in the share of the year the average worker is employed.

The decomposition of the trends summarized in Table 14 was done using data on the experience of youth in 1967 and 1977. In general, the analysis indicates that nearly all of the worsening in the E/P ratio of nonwhite young men was due to a decline in the percentage who worked at all during the year. Between 1967 and 1977, the percent of nonwhite men, 20-24, who worked at least one week declined from 86 to 74. Among 16-19 year-olds the drop was even larger, from 69 percent in 1967 to 47 percent in 1977. In contrast, among nonwhite young men who did work at least one week, the number of weeks worked in 1977 was almost as high as in 1967.

In the case of young nonwhite women, the worsening employment situation hit those who worked in 1977 and those who did not. Although the percent of nonwhite young women who worked at all dropped sharply, so did weeks employed per worker. Only 63 percent on nonwhite women, 20-24, worked during 1977, as compared to 70 percent in 1977. Among workers, average weeks employed fell from 32.7 to 29.2.

Another way of looking at the distribution is to calculate which youth accounted for most of the weeks of employment. Again, the figures indicate an increasing inequality among nonwhite youth, but not among white youth. In 1967, 49 percent of nonwhite young men, 16-19, accounted for 80 percent of the weeks of employment worked by this population. By 1977, the 80 percent of weeks worked was concentrated on only 34 percent of the population. Increases in the concentration of weeks worked on a smaller segment of the nonwhite youth population also occured for young women, 16-19 and 20-24, and for young men, 20-24. This rising inequality in the incidence of weeks worked did not occur among white youth as it did among nonwhite youth. For example about one-third of white women, 20-24, accounted for 72 percent of the employment in both 1967 and 1977.

The trends in earnings of black youth fit together with the employment trends. For those black youth who worked at all over the year, the amounts earned per week moved almost to equality with weekly earnings of white youth. Among 16-19 year-olds of both sexes, earnings per week differed little by race in 1967 and in 1977. Black 20-24 year-old workers earned less than white workers in 1967, but narrowed the gap by 1977. Black men, 20-24 moved from 77 percent of white weekly earnings in 1967 to 93 percent in 1977. Earnings of black women were virtually equal to those of white women by 1977.

The conclusions from these data are striking, especially in the case of black young men. A sharp drop occurred between 1967 and 1977 in the percentage who had any work experience over an entire year. While 3 of 4 white men, 16-19, worked in 1977, only 2 out of 4 blacks, 16-19, worked even one week. However, among the group of black young men that did work, the situation appears to have improved. Earnings per week rose and number of weeks employed dropped only slightly for those who found at least one week of work over the year. Thus, the key to determining the worsening employment situation for young black men lies in focusing on why the group with no work record at all rose between 1967 and 1977.

It is important to point out that the focus on nonworkers would explain some of the trends, but not the levels of racial differentials in youth employment. Weeks employed per worker were almost as high for black 20-24 year-olds as for white 20-24 year-olds in 1977. But, among 16-19 year-olds, a sizable racial differential existed in weeks employed per worker. Black teenagers who worked during the year averaged only 63-70 percent of the weeks of employment over the year worked by white teenagers.

In summary, it is important to distinguish between (1) factors determining the level of youth employment and unemployment and unemployment and (2) factors determining the distribution of youth employment and unemployment.

The levels of youth employment and unemployment depend on the quality and characteristics of young workers and on the demand for young workers. Youth engage in frequent moves into and out of the labor force and from one job to another. Although this high turnover is one reason youth unemployment rates exceed adult rates, about 70 percent of the youth-adult unemployment differential would remain even if one were able to eliminate turnover induced youth unemployment. Seasonal patterns of youth labor force entry do not apparently contribute to high youth unemployment. The relation between family status and employment patterns and between schooling and employment patterns indicates that young workers can afford a more casual attachment to the labor force than can adult workers. As youth leave school and become financially independent, their employment levels go up and their unemployment rates go down. Differences in family status accounted for 75 percent of the differences in employment-population ratios between 16-19 year-old and 25-34 year-old white men.

The limited work experience, education, and seniority of young workers are other causes of high levels of youth unemployment. Employers often express a preference for workers who have completed high school and who have a credible work record. While direct age-related restrictions by employers, unions and child labor laws may contribute to the young worker's problem in gaining such experience, there is little evidence on the size of such effects.

Table 14

Racial Differentials in Employment and Earnings For Young Workers: 1967 and 1977

	Nonwhite Men		White Men		Nonwhite Women		White Women	
	1967	1977	1967	1977	1967	1977	1967	1977
16-19 Year-Olds:								
E/P [a]	.29	.18	.41	.38	.18	.11	.26	.32
Percent Who Worked	.69	.47	.75	.74	.50	.35	.59	.64
Weeks Worked [b]	22.0	22.3	26.4	28.5	18.6	16.5	23.3	26.0
Earnings per week [c]	$39	$73	$38	$79	$31	$62	$37	$62
20-24 Year-Olds:								
E/P [a]	.62	.52	.89	.86	.44	.35	.46	.56
Percent [b] Who Worked	86	74	89	91	72	79	70	63
Weeks Worked	37.5	36.6	38.1	39.9	32.7	29.2	33.5	36.6
Earnings per week [c]	$76	$165	$99	$178	$59	$121	$68	$123

Source: Unpublished tabulations from the March 1968 and March 1978 Current Population Surveys.

a. The employment-population ratio is the total weeks of employment in 1967 or 1977 divided by the population times 52.

b. Weeks worked is the average weeks of employment of those who worked at least one week in 1967 or 1977.

c. Earnings per week equals total earnings of those with earnings divided by weeks worked of those with earnings. Only earnings per week was calculated for blacks only; the other figures are data on all nonwhites.

What makes the differences between youth and adult characteristics especially significant are the wage rigidities that prevent the youth wage from falling low enough to prevent excessive unemployment. Studies of the minimum wage law indicate that the expansion of the law's coverage in 1966 accounted for a significant unemployment effect on teenagers. The relation between youth employment and other wage rigidities has not been documented.

The changing levels of youth employment and unemployment have been influenced by the overall demand for workers as well as the demand for youth-specific workers. As demand expands to reduce the adult male unemployment rate from 3.8 to 3.0 the percentage of white employed youth rises by 2 percentage points and percentage of black youth employed rises by 4 percentage points. Trends in armed forces enrollment have an independent impact on youth employment levels. As armed forces enrollment rises, the youth employment-population ratio also rises. The presence of high shares of youth-specific industries has a positive impact on the employment situation of young people.

The aggregate youth labor supply appears to exert a negative effect on the employment prospects of young people. The bulge in the youth labor force clearly resulted in a decline in youth wage rates. However, this wage adjustment was apparently inadequate to prevent a population-induced rise in youth unemployment.

Looking at racial differences in employment patterns of young ment, one finds that much of the trend in out-of-school employment-population ratios has been associated with differences in armed forces enrollment patterns. It may be that poor civilian employment prospects have caused more young blacks than young whites to enter the military; or it may be that more young blacks than young whites have voluntarily chosen military employment over civilian employment. Another factor potentially influencing racial differentials in male employment is the racial differential in crime rates and arrest records. Employers apparently still utilize arrest record data in making hiring decisions, although this practice is illegal. Since young black men have considerably higher arrest records than young white men, the gap in employment may be associated with differences in contact with crime.

Family status differences between white and nonwhite women, 20-24, appear to account for about half their differences in employment-population ratios. A nonwhite woman, 20-24, is 10 percentage points more likely to live with her own child than is a 20-24 year-old white woman.

Low income and nonwhite young men and women are likely to live in poverty areas and likely to have parents who are not employed. Both factors worsen the employment prospects of these groups. it is interesting that after one takes account for education, school status, and family background, low income young men are more likely to be in the labor force and in jobs, but also more likely to experience unemployment than are moderate or high income youth. Unfortunately, race exerts a large effect on youth employment and unemployment that is independent of years of education, school status, and family background. According to analyses based on official data sources, young black men show 10 points lower employment probabilities than do young white men with similar basic characteristics.

Several data sources other than the Current Population Survey generally show less severe youth employment problems. However, the youth employment rates still far exceed adult rates and nonwhite youth generally experience much more employment and nonemployment than white youth. Only the data from the survey of 1972 high school graduates indicate that the problem is qualitatively different from what comes out of CPS data. According to the high school senior survey, nearly all high school graduates integrate effectively into the labor market. The conclusion applied to nonwhites as well as whites. By 1976, there was virtually racial equality in the employment and earnings outcomes of the 1972 male graduates.

Appendix 1

Comparison of Rates of School and Labor Force Activity for Young Men, by Major Activity, 1967, 16-21 year olds. NLS vs. CPS Surveys

	No. in NLS Sample	Major Activity NLS	Major Activity CPS	Employment Population NLS	Employment Population CPS	LFPR NLS	LFPR CPS	Unemploym NLS	Unemploym CP
White Males									
Major Activity:									
School	1657	66.3	66.1	42.1	33.0	52.9	37.5	20.4	11
Not School	786	33.7	33.9	86.6	83.8	92.5	91.6	6.4	8
Nonwhite Males									
Major Activity:									
School	595	55.8	55.8	32.6	21.6	51.3	28.8	36.5	25
Not School	453	44.2	44.2	80.8	73.1	94.2	90.1	14.3	18

Appendix 2

Comparison of Rates of School and Labor Force Activity for Young Men by Race, in 1967. NLS vs CPS Surveys

	No. in NLS Sample	% in School		Employment Population		LFPR *		Unemployment	
		NLS	CPS	NLS	CPS	NLS	CPS	NLS	CPS
White Males									
16 - 17	1343	91.2	91.4	44.2	36.7	56.0	42.8	21.0	14.4
18 - 19	1123	64.4	57.2	60.6	56.7	69.9	63.4	13.3	10.6
20 - 24	1511	34.1	32.2	80.1	78.0	84.5	81.2	5.2	4.0
Nonwhite Males									
16 - 17	633	83.8	88.0	39.4	26.2	58.5	36.7	32.7	28.8
18 - 19	499	53.0	50.5	59.1	47.0	74.9	60.1	21.1	21.7
20 - 24	465	13.3	18.9	81.7	76.9	92.5	85.7	11.7	10.3

LFPR: Labor Force Participation Rate = $\frac{\text{No. in Labor Force}}{\text{Population}}$

Appendix 3

STATISTIC	National Longitudinal Study		Current Population Survey, October 1972	
	White	Nonwhite	White	Nonwhite
Employment Ratio	.880	.784	.815	.680
Labor Force Participation	.929	.902	.916	.880
Unemployment Rate	.054	.130	.110	.227

Appendix 4

Comparisons of Youth Employment - Population Ratios from Unemployment Rates from the 1977 CPS and 1977 NCS

	Employment-Population Ratios				Unemployment Rates		
	CPS	NCS	Difference NCS-CPS		CPS	NCS	Difference NCS-CPS
White Males							
16-17	45.1	45.7	0.6	16-17	17.6	16.6	-1.0
18-19	65.2	68.5	3.3	18-19	13.0	9.9	-3.1
20-21	71.6	75.3	3.7	20-24	9.3	6.7	-2.6
22-24	83.9	84.7	0.8				
Non White Males							
16-17	18.9	27.0	8.1	16-17	38.7	30.4	-8.3
18-19	37.0	46.0	9.0	18-19	36.1	22.6	-13.5
20-21	52.8	63.0	10.2	20-24	21.7	11.1	-10.6
22-24	67.8	73.6	5.8				
White Females							
16-17	37.5	37.0	-0.5	16-17	18.2	15.4	-2.8
18-19	54.3	57.0	2.7	18-19	14.2	10.8	-3.4
20-21	60.2	63.0	0.8	20-24	9.3	7.2	-2.1
22-24	62.3	61.0	-1.3				
Non White Females							
16-17	12.5	15.3	2.8	16-17	44.7	36.8	-7.9
18-19	28.1	31.4	3.3	18-19	37.4	31.0	-6.4
20-21	38.3	42.5	4.2	20-24	23.6	16.0	-7.6
22-24	50.6	54.4	3.8				

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YOUTH EMPLOYMENT: A NEEDS ASSESSMENT

by

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Employment Problems of Youth

Over the long-term, as the "baby boom" cohorts increased the number of people 16 to 24 by 80 percent between 1962 and 1978, employment for this age group increased by 110 percent. This was not enough to accommodate the much greater desire for jobs by these cohorts compared with previous cohorts. But it was enough to increase from 50 percent to 58 percent the proportion of young people with jobs (BLS). Much of this increase in employment has been among school-age youth. There has been a significant increase in the proportion of young people who combine school and work. The proportion for white females aged 16-17, went from 20 percent in 1964 to 41 percent in 1978, and for males from 30 percent to 43 percent. Among students aged 20 to 24, 57 percent of white females and 55 percent white males are employed (BLS). Students' likelihood of employment, job duration, and hours all increase with each year of age and are higher for young people whose family income is above poverty and who are at or above expected grade for their age (Froomkin). Those students who work may establish a different pattern or intensity of daily activities from those who do not; work does not impinge significantly on school or homework time, at least until it passes half-time equivalence (MDRC, Froomkin). Students' jobs tend to be temporary; only a third are jobs the youth would like to continue in the future; only 14 percent are related to the student's field of study; and they are less likely than the jobs of nonstudents to provide opportunities for promotion or skill development (Stern). Nevertheless, the combination of study and work improves future employment prospects and has a significant and persistent positive effect on earnings (Froomkin, Meyer and Wise).

After graduation from high school, young people who do not go to college make a gradual transition to career employment. Half of all youth who do not go to postsecondary education continue in their student jobs (Nolfi). "Secondary jobs" which require little skill or stability--whether in certain types of large firms, in small stores, or doing off-the-book work--may engage some young males, particularly for a year or two (Osterman). The ready availability of such jobs, and young people's tendency to wait until they hear of a job before looking for work, may account for much of their "success" in moving directly into employment (Osterman). Gradually, they seek and find "primary jobs" in firms where stability, skill, and their future potential are important. Good attitudes, a work history, generic skills, and a relative in the firm are helpful in the transition to career employment (Osterman).

Education is important, but has less effect on the transition for minorities and women (Andrisani). During the later stages of business cycle expansion, this transition is easier (Osterman). Once the transition is made, youth are unlikely to slide back into unskilled work (Andrisani). There is some evidence that young people today are more concentrated in secondary jobs than before the boom cohorts entered the labor market (Freedman). It is not known whether this corresponds just to the increase in the proportion of students who are employed, or whether it is now more difficult for out-of-school youth to make the transition to career employment (Stern).

The transitions to work and to career jobs are accompanied by much uncertainty. In 1972, 38 percent of all high school seniors were still undecided whether to go on to college. Two years after graduation, no more than half of those who had planned to go to college full time (or to work full time, or to be in the military), had done so. For those with plans involving combinations of activities, the probability of realization was even lower (Nolfi). Occupational plans were changed by 19 percent of those initially choosing professional careers, and by proportions ranging from 30 percent (clerical) to 77 percent (sales) for those planning other occupations (NCES). While change is inevitable and often helpful, two-thirds of a national sample of high school seniors thought their schools should have placed more emphasis on vocational/technical programs, should have offered more practical work experience, and should help students find jobs when they leave school (NCES). A 1976 questionnaire to 1969 graduates of Worcester schools included a space for comments; in the response, "... the topic of guidance was by far the most frequently discussed, often in anguished or even angry tones" (Boston). All students, college-going as well as vocational, felt a need for more help with career decision making.

The Concentrated Burden of Unemployment

A small proportion of young people--about 10 percent--bear most of the burden of youth unemployment. The 7 percent of young white females with 15 weeks or more of unemployment account for about 65 percent of the weeks lost by all young white females together. The 18 percent of young black females with 15 weeks or more account for about 77 percent of the weeks lost by this group. The 11 percent of young white males, for 70 percent of their weeks lost. And the 21 percent of black males, for about 82 percent of their weeks lost. The concentration of unemployment is higher for those aged 20 to 24 than for 16 to 19 year-olds, especially for females and blacks. Among blacks, 5 percent of the females and 6 percent of the males did not find any work during the year; they accounted for 36 percent and about 30 percent, respectively, of the weeks lost by their group (Lerman). Moreover, if those who want a job now but think they cannot get one and so are not looking (discouraged workers) are likely to have suffered considerable unemployment before becoming discouraged, then the true concentration of unemployment may be even higher.

Youth joblessness is concentrated among persons from more disadvantaged homes and, with all other characteristics fixed, among blacks. Those with fewer years of schooling also have much lower rates of employment (Freeman). The employment/population ratio for poor males is only 70 percent of that for nonpoor males. Nonpoor black females have a higher employment/population ratio than whites (51 percent vs 45 percent), and poor black females have a lower ratio (19 percent vs 31 percent) (BLS). Overall employment/population ratios are 62 percent for white youth, 52 percent for blacks, and 47 percent for Hispanics. The employment/population ratios for young people not enrolled in school are 54 percent for dropouts, 80 percent for high school graduates, 83 percent for those with some college, and 90 percent for college graduates (all not enrolled in school).

In addition to personal factors, living in an area with a high concentration of poor people, an industrial structure unfavorable to youth, or a large proportion of youth and women in the labor market decreases youth employment, and these conditions generally have a greater impact on black youth. White and Hispanic youth in poverty areas have somewhat lower employment/population ratios than youth elsewhere; poverty area black youth have an employment/population ratio one-half that of black youth in nonpoverty areas. An industrial structure in the area which includes a low proportion of jobs commonly held by young men or women is harmful for men, especially blacks, but not women. This suggests that white males have been better able than black males to penetrate into other sectors of the economy. Furthermore, secular shifts in industrial structure between 1960 and 1979 have reduced the proportion of jobs typically held by young black men (Osterman). Adult women's wages have a significant effect on employment of blacks but not whites, indicating that women my compete with youth for some jobs, but that the array of jobs avilable for white youth included more for which white women do not compete successfully. And a large size of the youth cohort has some effect in reducing teenagers employment, especially for boys (Freeman). Strong economic growth, not surprisingly, improves the relative position of blacks (Freeman). The general migration of population to the suburbs had no effect on black youth employment presumably because the balance between employment opportunities and residence in the cities was maintained (*Osterman*).

The major problem for black youth is employment; for current cohorts of youth, being black is not a major depressant of wages (Freeman). There is a clear reduction in wage elasticities for both young black men and women between 1960 and 1970, bringing them closer to those for whites, and indicating reduction in discrimination (Osterman). On the other hand, sensitivity of black youth employment to both industrial structure and adult women's wages increased; furthermore, Osterman's 1970 equations show a more powerful discouraged worker effect (Osterman). This is consistent with the rising relative unemployment of black compared to white youth, and with employment/population ratios that are relatively low for blacks and are declining for black males (BLS). In sum, minority youth from low income families start part-time paid employment at a much later age than most youth; much of the differential in unemployment is associated with labor force entry; and, particularly for males, the transition to career jobs tends to be later and more difficult (Datta, Feldstein). However, those black youth who follow the pattern typical for youth in general and/or who come from less disadvantaged backgrounds find work in similar jobs at similar wages as whites.

Effects in the Future

Young men and women with poor employment records will typically have comparatively poor records later. Controlling for some individual characteristics, young men with a six month spell out of work tend to have an additional 3 to 4 weeks out of work one year later. On the other hand, young men in the second, third, or fourth year out of school who have never been unemployed tend to have wages that are 10 to 20 percent higher than the wages of those who have been unemployed (Ellwood). For women, the effect of poor early employment records is even stronger (Corcoran). A less sophisticated analysis showed a stronger effect for blacks and for those who spent time neither at work nor in school (Osterman, Stevenson). Early child bearing and child rearing, and single parent births, which are more common among low-income and minority youth, tend to keep young mothers from developing skills and experience with similar scarring effects (Datta). And although unemployment and crime/juvenile delinquency by young people are not correlated over time, there is indirect demographic and "street" evidence that those who are not employed are more likely to be involved in trouble (Barton, Bullock).

As for future demographic trends, the number of white youth 16 to 24 will decline 8 percent by 1985, and the number in the labor force will hold level. For blacks the population will increase 4 percent and the labor force 7 percent. The number of Hispanics will increase more rapidly (Census). These projections have three implications.

- First, the problem associated with disadvantaged and minority youth will not necessarily abate, because the more disadvantaged groups will continue to increase in relative size.
- Second, with fewer young entrants into the work force at a time of slow productivity growth and sharply rising energy costs, the education and effective career placement of young entrants will be even more important.
- And third, the earnings, particularly of men, in the "crowded" cohorts that are now working their way into career jobs may well continue to be affected, both by their early experiences and by continued crowding (Freeman).

Economic Effects of Education

Education is of course valued for a great deal more than simply its effect on employment and earnings. Most fundamentally, education contributes to an individual's learning and other intellectual capabilities, enabling him to share in his society's culture, to participate as a citizen in its politics, to cope with the world around him, and to lead a richer and more satisfying life. For a small number of crucial people, education is the foundation for scientific discovery, literary creation, and the development of other kinds of ideas. On a more practical level, there is rapidly increasing evidence that education affects all spheres of decisionmaking. Educational attainment has been shown to improve health and nutrition, reduce fertility, improve parenting, increase the efficiency of consumption and investment decisions, increase volunteer activities, reduce crime, and increase adaptability (National Academy of Education, Juster).

As to the effects of education on employment and earnings, the literature is vast and rapidly growing. Its main theme, human capital theory, is surrounded by conflicting and modifying theories and evidence. Although there are signs that greater consensus may be developing, the field is still in flux (Sahota, Blaug). What the economists are slowly documenting with their reams of papers seems to be what the human development people have been saying based on studying individuals: each age has its own developmental tasks, and accomplishing them well provides a base and/or an entree into the work of the next stage.

There is broad agreement that education increases both employment stability and earnings and partially offsets the effects of inequalities in family background.

- Educational attainment increases labor force participation, employment stability, and resources invested in on-the-job learning.
- Four years of high school and four years of college are each associated with an increase in earnings of 40 to 50 percent.
- Holding ability and family background measures constant reduces the contribution of educational attainment, but more than half of the association--15 to 40 percent--still remains.
- Increased educational attainment has substantially reduced the effects of demographic background on income over the past decade.

The above statements are phrased to maximize agreement. They are based on Who Gets Ahead? by Jencks et al. and the papers in the three National Bureau volumes edited by Juster.

How Families Affect Earnings

Studies are beginning to document the routes by which family background affects earnings--including preschool attention, reading encouragement, longer school attendance, and help with getting established in an occupation.

- There have been a series of studies showing that parents with more education spend more time with each child (Leibowitz, Stafford and Hill). The differential seems to be greatest for preschool children, and the time spent affects these children's education.

- Control for "reading matter in the home" substantially weakens the effect of general socio-economic status (Freeman). This would capture the effect of parents who read, benefit from reading, teach and encourage their children to read, and also have reading materials available.

- Measured status variables--education/occupation/income of parents and number of siblings--seem to affect the young person's academic ability and duration of education; both through these variables and directly, the status variables affect the young person's occupation (Jencks). This chain of relationships is much stronger than the relationships of background, ability, and education to earnings (Jencks). There is evidence that families are influential in encouraging young people to continue in school, and that college particularly provides access to higher status occupations (Jencks). Family role models and connections may be helpful in getting a young person into an occupation, but do not seem to affect his earnings once there.

- The demographic variables that directly affect occupation and earnings (with education and abilities statistically controlled) are race, religion, ethnicity, father's occupation, and farm or Southern upbringing. (Direct inheritance of father's occupation seems to be small. The location variables influence current place of residence.) (Jencks)

- Finally, brothers share elements of family background which are not captured in the demographic variables such as listed above. This portion of shared background seems to operate little, if at all, through cognitive skills, and,--unlike the demographic variables--seems to affect certain outcomes but not others (Jencks). There are hints that the elements of shared background not measured by demographic variables may influence the young person's specific skills, personality traits, and values, and may include additional location/environmental factors that affect their opportunities.

Academic Ability Increases Earnings

Among the abilities assessed, the single best predictor of earnings is a test covering a wide range of academic abilities (Jencks). This is not surprising.

- First, academic ability explains 34 percent of the variance in education; adolescents with greater academic ability succeed economically to a considerable degree because they are selectively encouraged to have higher aspirations and to attend school longer (Jencks). Although there are different verbal and quantitative abilities, that can be measured separately, these measures are highly correlated with each other. In sum, "doing well in school," at that in which the schools take a formal interest, seems to be the key to longer school attendance and higher occupation attainment and thereby contributes to between a third and a half of the effect of academic ability on earnings (Jencks).

- Second, academic ability can be expected to be useful generally in almost all occupations, whereas many other abilities and traits are more restrictively useful to specific occupations only. For a great many occupations one or another of these other skills may well be more important than academic ability; but because the other skills that are important differ from occupation to occupation, any one of them taken alone may be a good deal less important than academic ability in explaining the overall distribution of earnings. Thus, even though academic ability would be the most important variable in explaining the overall distribution of earnings, the keys to employment in these occupations would be the more specific abilities. Evidence on personality traits and vocational skills, discussed elsewhere in this paper, make this hypothesis plausible.

Tests of academic ability, given as early as sixth grade--and perhaps even third grade--predict educational attainment, occupational status, and earnings as well as tests given later. Higher-scoring individuals are more likely to be in the college curriculum (accounting for 21 percent of the test's effect) and to be encouraged by parents, friends, and teachers (up to 40 percent of the effect).

Jencks finds no significant interaction between academic ability and schooling when predicting earnings, and finds the occupational payoff for bright students no greater than for slow learners who persist in school. He quotes Bloom to the effect that under very favorable conditions a large proportion of normally slow learners can learn as much as normally fast learners. When previously slow learners do succeed in reaching the same level of achievement as fast learners, they appear to be able to learn equally complex subsequent ideas, their retention is equally good, and their application of newly learned ideas is equally competent. Other studies confirm the lack of interaction between academic ability and schooling at the secondary level, but do find interaction at higher levels of schooling (Hause, Wachtel). While the effects of ability on occupation are primarily through the length of education, ability does have a separate effect on earnings which increases with labor market experience (Jencks, Juster, Wise).

...And So Does Leadership Ability

In personality as in ability, Jencks sought traits which would be valued by enough different employers so that men with the trait enjoy a general competitive advantage over those who lack it. He found a cluster of noncognitive traits, assessed by Project Talent, each of which seemed to have a small and somewhat separable effect. Cumulatively, these personality traits were as important as cognitive skills in determining occupation (though surprisingly they had no correlation with expressed occupational preference of the student). They also have a substantial effect on earnings, independent of schooling and occupational status.

In particular, leadership or executive ability, whether assessed by the student, the teacher, or through behavior, had a large and independent effect on earnings 20 to 40 years later--by one measure, more effect than either family background or academic ability and grades. Leadership explains more of the variation near the top of the earnings distribution than near the bottom. This would be expected due to the relatively greater importance of leadership within the higher income occupations. Another study also confirms the importance of leadership (and other personal characteristics) for corporate executives (Wise).

Looking at other traits, students with good study habits and group memberships obtain more schooling, but gain no additional advantage. Those with social skills get less schooling and enter lower status occupations, but do not have appreciably lower earnings--perhaps because many jobs require social skills. Intellectual reading raises educational attainment but not occupational status, and actually depresses earnings.

These little vignettes begin to show how badly we need a tested theory of occupational choice before we can complete the analysis of earnings determination, and how complex such a theory might be (Blaug). Project Talent did not include, and we have yet to assess, many of the personality traits found to be significant by social scientists (Yankelovitch). Sattinger's study of relative advantage in a group of people given a variety of mechanical aptitude tests underscores the importance of including a wide range of special manual, cognitive, and effective skills and talents in the same research program.

The Returns to Education

So we come to the returns to educational attainment in terms of additional occupational prestige and earnings. Jencks et al. conclude as follows:

> Completing high school rather than elementary school is associated with an occupational advantage of close to half a standard deviation among men 26 to 64 years old. Among men from the same homes and with the same test scores, the expected advantage is only a quarter of a standard deviation. The occupational benefits of secondary education do not appear to vary systematically by cohort or test score. The benefits are larger for whites than for nonwhites and larger for nonfarm sons than for farm sons.
>
> Completing college rather than high school is associated with an occupational advantage of more than one standard deviation among 25 to 64 year olds. The advantage is almost the same when family background and test scores are controlled. Nonwhites and farmers' sons appear to benefit more than others if they complete college. The occupational advantage of completing college does not vary systematically with test scores. The advantage is larger among younger men in our samples.

With respect to the greater occupational advantage of college, Taubman and Wales have calculated that almost half of the earnings differential between college graduates and high school graduates can be explained by the exclusion of capable high school graduates from higher-paying occupations. Other studies confirm the greater benefits to college compared with high school for blacks (Smith & Walch, Karwert).

With respect to earnings, Jencks says:

> Four years of high school are associated with a 40 percent increase in earnings among men with the same amount of experience in our most representative recent national samples. If we could control both family background and test scores, we would expect this advantage to fall to between 15 and 25 percent.
>
> Four years of college are associated with a 49 percent earnings advantage among respondents with the same amount of experience. We would expect controlling family background and test scores to reduce this advantage to between 30 and 40 percent. The earnings advantage of college graduates derives largely from the fact that they enter higher status occupations than other men. This is not so true of secondary schooling.

If these kinds of data are to provide helpful signals for current policymaking and for young people now making education and career choices, some comments are in order.

- First, in concept, both policymakers and youth are asking what difference it will make for an individual in terms of future earnings if additional young people in the current cohort stay on in high school until graduation or go on to college. In practice, the difference is estimated on cross-section data that include many cohorts of different sizes who lived through different political and economic experiences.

- Second, for demographic reasons alone, this would make a great deal of difference for current cohorts. From 1964 to 1969, an unusually sharp increase in the proportion of high school to college graduates took place as a result of the demographic profile. This was followed by a sharp reversal in which the number of college graduates shot up from 12.6 million in 1969 to 16.5 million in 1976, while the number of high school graduates increased only from 38.4 to 39.8 million (National Academy of Education). Thus, Freeman calculates that the private rate of return on a college education slipped from about 12.5 percent in 1968 to 10 percent in 1973 and the social rate from 13 to 10.5 percent. These declines result from a continuing rise in college costs combined with a decrease in the earnings of new college graduates vis-a-vis their peers from high school. There is considerable evidence that this relative decrease in earnings is due to occupational "bumping." Increasing proportions of college graduates are finding jobs in clerical, sales, and service occupations. As Freeman notes, persons in the large college graduating classes of the late 1960's and early 1970's may suffer from a relatively large supply over their entire lives.

- Third, Taubman and Wales show that the proportion of high ability students going on to college has been rising at an accelerating rate. By the early 1960's, 90 percent of those at the 90th percentile and 72 percent of those at the 75th percentile went to college. The increasing dispersion between ability levels of college and high school graduates may be approaching its limit. If so, and if high ability and high levels of education do interact, this would no longer tend to move the rates of return for high school and college graduates further apart.

- Fourth, the samples used to estimate the above rates of return exclude people who are not employed; and all the samples - especially the ones used for the ability and background adjustments - tend to undercount the disadvantaged. Those exclusions lead to an underestimate of the effect of high school graduation. Dropouts have very low employment/population ratios; the exclusion of people who are unemployed or out of the labor force raises the apparent earnings of dropouts and thereby reduces the apparent gains from completing high school. The disadvantaged have relatively high dropout rates, so underrating this group also raises the apparent earnings of dropouts. The downward bias in the estimated return to high school graduation, due in part to basing the results solely on wage rates without accounting for the continuity of employment, may be quite important. Mincer states that at lower levels of schooling the impact of education is about equally divided between gains in employment stability and gains in wage rates, whereas the effects of higher levels of education are largely through wage rates.

If the key ways in which education at the high school level now "pays off" are by increasing employment stability and enhancing access into the primary labor market (whether in the same or different occupations), then the underestimate of high school returns from the above data is even more likely. Among the reasons for the greater employment stability of those with more education are their employment in more stable industries, the greater difficulty of capital substitution for skilled than unskilled labor, the complementarity between education and job-specific (and therefore tenure-maintaining) skills, and their shorter duration of unemployment (Mincer).

- And fifth, the relative rate of return for college education over high school education is higher for blacks and women than for white men. For reasons that will be argued later, this implies that there are opportunities to increase the return to high school by placing black and female graduates in primary market jobs such as those held by white male high school graduates.

This analysis leads to the conclusion that the relative advantage of college over high school graduation may be narrowing. That trend could, and for equity reasons should, be accelerated by measures to improve the job placement of black and female high school graduates. The narrowing also could, and again for equity reasons should, be accelerated further by improved compensatory education for disadvantaged students at the upper elementary, junior-high school, and high school levels and by secondary school reforms particularly in poverty areas. Blacks, women, and disadvantaged youth should still be encouraged and helped to go on to college, but they should not need to do so in order to gain the advantages of primary, stable, career employment.

Demand for General and Specific Skills

What can be said about the need for general and specific skills? Estimates are rough. They show that the proportion of jobs requiring only a low GED (general education level), equivalent to less than high school, fell from 34% in 1950 to 9% in 1960 and 8% in 1970. Over this period the proportion of the labor force with less than a high school education ranged from 61% in 1950 to 39% in 1970. These percentages are consistently much higher than the percentages of jobs classified as being suitable for people with such little schooling. Thus, a great many people with less than high school education were doing jobs that "required" higher levels of general education than they had. At the other end of the spectrum, jobs requiring more than a college equivalent level of education increased from 6% in 1960 to 10% in 1970, but 13% of the labor force was at this level. Data from a 1971 Current Population Survey of the general population which included both education data and occupation codes from the *Dictionary of Occupational Titles* indicate that about 12% of the labor force was over-utilized and 25% were under-utilized according to such criteria (Gottlieb).

The Department of Labor has projected that expansion and replacement jobs between 1974 and 1985 will add up to 58 million openings, of which 34 million will be in white collar work, 11 million in service jobs, and 12.5 million in blue collar jobs. However, Rumberger has noted that the terms "white collar" and "blue collar" are void of any meaning with regard to job content or requisite jobs skills. He presented a table showing the substantial range of GED levels covered by each occupational group in 1960 and 1976. Although professional/technical jobs mostly require high general education levels, over half of the managerial jobs require only middle levels. Farm and craft jobs have the next highest distribution of job skills. *This study concludes that there has been a shift in distribution of required general skills toward the middle and upper middle of the range, and away from both ends.* In particular, he finds a reduction in the proportion of professional and managerial jobs requiring the top (GED level 6) skills. Most of the change was due to changing requirements within occupations rather than shifts among them.

Looking at general skills another way, Young and Jamison found the effects of reading scores on wage rate and work hours were insignificant when schooling which was significant was controlled. However, Datta makes a common-sense case that the need for functional literacy has become pervasive.

As for skill-specific training the returns for vocational education seem to be the same as the returns for academic education, with family background, academic ability, and duration of education held constant. *Vocational students typically have lower socio-economic* status and less academic ability than academic students. Scholastic aptitude makes a greater contribution to earnings of vocational graduates than to graduates of the general or college preparatory tracks. Post-school training has a slightly greater effect on the hourly earnings of vocational than general students, but adds as much to the earnings of dropouts as graduates. However, black graduates gain significantly in occupational status compared with black dropouts (Grasso and Shea).

Factors After Labor Market Entry

With entry into employment, several other factors begin to have a significant effect on earnings. Individuals learn both in formal training programs and informally on the job. These "learning curves" have been documented by Mincer, who finds that one-third of the variance in earnings can be explained by schooling and 60% by schooling and experience together. *In addition, studies have shown that individuals with identical "human capital" receive different returns depending on where they are employed.* *There is a persistent earnings differential among similar* individuals in different locations (region, city size) and in different industries and occupations (Wachtel & Betsey, Hanushek). Young people, particularly the disadvantaged, need to be more aware of these consistent differences when deciding where to live and work.

Joining such demand factors together with the improving understanding of supply will be necessary for a full explanation of the distribution of earnings. The relative importance of the factors involved may also differ over the stages of the business cycle. For example, levels of education not needed to fund a job at a cyclical peak might be very helpful in finding employment during a recession.

Educational Attainment

The educational attainment of the population in the United States has risen considerably in recent decades, and has become more equally distributed. The following table shows the percentage of people aged 25 to 29 with different levels of educational attainment in different years:

	All Groups	Blacks	Hispanics*
Less than 5 years of school			
1940	5.9	27.7	N.A.
1960	2.8	7.0	N.A.
1976	.8	.9	6.7
4 years of high school or more			
1940	38.1	11.6	N.A.
1960	60.7	37.7	N.A.
1976	84.7	73.8	54.6
4 years of college or more			
1940	5.9	1.6	N.A.
1960	11.1	4.8	N.A.
1976	23.7	13.0	N.A.

* Figures for ages 25 to 34.

By geographic area, attainment is lowest in the South and highest in the West, and, for blacks, in New England. For Hispanics, attainment is especially low in the Southwest and in several large industrial states of the Northeast.

Statistics for current school enrollment and retention show continued equalization between blacks and whites and between other groups, but for the school age population as a whole the average attainment is no longer rising. At every age, the enrollment rates for non-whites are close to or above the rates for whites. The 1975 enrollment rates for non-whites aged 16-17, 18-19, 20-24, and 25-34, were 89.1, 51.0, 22.1, and 9.5; for whites the rates were: 89.1, 45.4, 23.4, and 8.0.

Of all children who were in fifth grade in the fall of 1942, about half graduated in 1950. Of those who were in fifth grade in the fall of 1960, three-quarters graduated in 1968, and this retention rate has held level since then. Of the high school graduates in 1950, one-fifth went on to college. The proportion rose to 45% for 1968 high school graduates, and also has held level since then.

The high school dropout pattern by age, race, and sex also shows equalizing changes. Between 1970 and 1976, the proportion of blacks who had dropped out declined sharply for every age/sex group. For whites, the proportion who had dropped out rose a bit for most groups up to ages 20-21. Thus, in 1976 the proportion of dropouts among blacks at ages 14-15, 16-17, and 18-19 were 1.0, 9.5, and 20.0%, compared with 1.9, 8.4, and 16.3% for whites. In contrast, in 1970 the black dropout rates had been almost double those for whites. Below age 17, the rates for female teenagers were slightly higher than for males, but beyond that age the females' rate was lower.

Educational Aspirations

Blacks show persistently higher levels of educational and occupational aspirations than whites. Although the proportion of black high school seniors who plan to attend college is lower than for whites, the proportion who say they may attend college and those who say they plan to or may attend vocational school are both higher, so that fewer have no post-secondary education plans or aspirations. Fewer blacks (57%) than whites (71%) realize their senior year plans in the following year, but despite this they continue to have somewhat higher aspirations. And the data show that at each family income level a slightly larger percentage of blacks than whites is in 4-year colleges as well as in 2-year and vocational/technical institutions (NLS 72, CPS). In total, 56% of white youth in the class of 1972 went on to postsecondary education, compared with 48% of all black and 46% of all Hispanic youth; by 1976 the percentages still enrolled were 25%, 24% and 23%.

The high school class of 1972 may also be looked at in terms of what happens to students of different academic ability. Of the seniors in 1972 with high academic ability, 80% went on to postsecondary education and 39% were still enrolled in 1976. This compares with 54% and 23% for the middle ability group, and 31% and 12% for those with low academic ability (NLS 72).

Asked "How important is a college education today?," 46% of non-whites and 35% of whites answered "very important." The same answer was given by 45% of those with income under $7,000 compared with 33% of those with incomes over $10,000 (Gallup). By 1977, 22% of black and 21% of Hispanic high school graduates between ages 18 and 34 were enrolled in college compared with 20% of whites. For both races, there is also an increasing tendency to enter college some years after high school graduation. Of all college freshmen in 1977, 21% had left high school 1 to 3 years before (compared with 18% in 1972), and 25% had left high school 4 or more years previously (compared with 19% in 1972) (CPS).

Black, Hispanic, and Indian Americans have yet to receive as high a proportion of bachelor's and higher degrees as their percentage of the college age population. For example, blacks, with 12.5% of the college age population, got 6.5% of the B.A.'s and M.A.'s and 4% of the doctor's and professional degrees. Black college students are still heavily overrepresented in education and the social sciences. Women also have yet to get a proportionate share of degrees awarded, but have sharply increased their advanced training in the past decade. Between 1965 and 1977, their share rose from 34% to 47% of the master's degrees, from 11% to 24% of the doctorates, and from 4% to 19% of the first professional degrees. Women are rapidly moving into nontraditional fields, but are still heavily represented in home economics, library sciences, health, education, and foreign languages.

Causes of Dropping Out

The main reason youth drop out is to get away from school. Among the chief significant variables are less academic ability, lower grade average in the tenth grade, lack of college plans, not being in the academic curriculum, dislike of school, grade failure, delinquent behavior in school, and lower evaluation of one's own academic ability (YIT). Another study found associations with lower IQ for whites, lack of knowledge of the world of work for blacks, not being in the vocational education curriculum for whites, and grade retardation for all youth (Hill). Project Talent data show that 75% of male and two-thirds of female dropouts come from the general curriculum; NLS data show 82% of white and 76% of black dropouts from the general curriculum. Thus, few dropouts come from the academic or vocational tracks. Dropouts are also significantly less engaged in student activities, and withdraw further from such activities before dropping out (D&D).

Home influences compound the problem. Dropouts tend to come from families with low socioeconomic level, to have more siblings, to come from broken homes, to perceive higher parental punitiveness, and to have low self esteem (YIT). The education of both parents, average income, and number of siblings were significant for whites in Hill's equations; for blacks, the mother's education was directly significant and the number of siblings affected dropping out through the IQ and knowledge-of-work variables. *Exposure to dropout influences in the home through family members whose educational attainment and aspirations are low seems to be very important for both males and females; social isolation at home is also a factor for females* (D&D).

The conclusion is not that dropouts are too dumb to graduate. *Two out of three dropouts were characterized as intellectually capable of graduating*, using as a standard a grade average of C or better, or an IQ above the 30th percentile, or a grade average of D or better with an IQ between the 20th and 30th percentiles (D&D). While inadequate academic ability is the reason some students drop out and the distribution of academic ability among dropouts as a whole is below average, additional predictors are necessary to identify most dropouts. There *seems to be a complex interplay of failure, feeling of failure, lack of encouragement, lack of achievement, and isolation from home and school activities.*

The degree of frustration involved is illuminated by the key findings of the study relating delinquency and dropout. Dropouts had higher police contact rates and self-reported delinquency when first observed. Rates of police contact, and serious police contact, rise at an accelerating rate so long as the youth are in school. *When students drop out, however, the rate falls suddenly to less than half its former level and continues downward. This is all the more significant because their former peers* who are going on to graduate still have rising delinquency rates (D&D).

On the basis of this and other evidence, authors of both of the dropout-specific longitudinal studies argue against retention campaigns and in favor of alternate credentials, "less time, more options," and restructuring schools into new learning environments in which competition is minimized. *They also argue that the problems leading to delinquency and dropout start very early indeed, so preventing school failure, encouraging educational attainment, and providing a sense of belonging and achievement would have to begin equally early.*

Labor Market Experiences of Dropouts

What outcomes might be achieved by a prevention strategy that got at the root causes of the differences between dropouts and graduates? By far the most immediate and measurable benefit would be a greater labor force attachment and lower unemployment. Dropouts who are 18 to 19 years old are two and a half times as likely to be out of the labor force as graduates who are not enrolled in college - 34% compared to 14%. The ratio declines a little with age; but those 22 to 24 who have dropped out still have a nonparticipation ratio of 32%, twice the 15% ratio for graduates. Dropouts who are in the labor force have much less success getting jobs. At age 18 to 19, 23% are unemployed compared with 14% for graduates, and by age 22 to 24, 16% are unemployed compared with 8% for graduates (BLS).

The following table shows nonparticipation and unemployment rates for dropouts and for high school graduates who are not enrolled in school, for people 16 to 24 years of age in 1977 classified according to sex and race:

		Nonparticipants		Unemployed	
		Graduates not in school, who are not in labor force as % of population	Dropouts who are not in labor force as % of population	Graduates not in school, who are unemployed as % of labor force	Dropouts who are unemployed as % of labor force
Men:	White	4.2%	9.9%	7.1%	14.2%
	Black	8.1%	23.5%	21.6%	32.4%
Women:	White	22.8%	54.4%	9.3%	22.1%
	Black	27.1%	56.9%	25.2%	49.3%

(Note: The percentages for nonparticipants and unemployed may not be added, because the denominators are different.)

The longitudinal data from Youth in Transition confirm these relationships. Five years after dropouts would have graduated, they had an unemployment rate of 15.4%, which was twice the 7.9% unemployment rate of their peers who did graduate from high school. This YIT study also looked at occupational status and wage rates and found little significant difference between dropouts and graduates for those who were employed. However, they predicted on the basis of other analyses that such differences would appear as dispersion increased with experience. The military has found that high school dropouts are less productive on the job, pose more disciplinary problems, and have much higher turnover rates than their high school graduate counterparts (Cooper). Marriage is often the key to these young dropouts settling down. However, the problem may then be passed on the next generation, because there is a strong association between parents, education and the educational attainment of their children, and parental involvement in children's reading is particularly important (Datta, Sticht). Moreover, this population begins child bearing at a young age, so the next generation will arrive quickly.

Competencies and Other Characteristics

Now let us turn from years of education attained to the quality of that education, to the trends, levels, and distribution of the competencies achieved by young people, and to their other characteristics relevant to employment success. The discussion will start with basic skills and higher academic skills, and then cover attitudes, transferable skills, and job specific skills.

There is considerable evidence to show that basic skills -- a term that commonly denotes the minimum level of proficiency in reading, writing, and arithmetic necessary to hold a job and function as a good citizen -- are not on the decline. In a study for NIE in 1978, Donald Fisher analyzed the major surveys of functional literacy in the past decade. He concluded that functional literacy is not on a downward trend. He compared the literacy levels of different cohorts in four surveys. Adjusted for differences in educational attainment, which was lower for the youngest cohorts because they had not yet completed their schooling, he found that schools are, or appear to be, more effective for the youngest cohort. In three out of four studies the improvement is statistically significant, although only marginally so in two.

The National Assessment for Educational Progress (NAEP) found that between 1971 and 1975, there was a statistically significant improvement in the reading scores of 9-year-olds in the United States. This improvement was recorded in all reading skills, but was most noteworthy in reference skills. Black 9-year-olds improved dramatically, as did children in the Southeast. Boys, children whose parents had no high school education, and those from smaller communities were among the other groups whose gains in reading were significant. Nearly all the changes in different reading skills for different categories of children were positive, and the larger improvements, including many which were statistically significant, were equalizing by race, sex, parents, education, and location (Southeast, small places, rural areas, and low income metropolitan areas). Title I funds seem to be making a difference. Indeed, NIE's 1978 *Compensatory Education Study* found that properly designed and implemented programs can begin to reduce the achievement differential suffered in the past by disadvantaged children.

For 13-year-olds, the NAEP found no overall change in reading skills between 1971 and 1975. There were significant improvements for black youth in the Southeast, and significant declines for youth in big cities. Results were better for literal comprehension than for inferential comprehension and reference skills. Aside from the big cities, the declines were for children of better educated parents, those in eighth rather than seventh grade, and girls. For those aged 17 there was likewise no overall change in reading skills. Declines were detected for 17-year-olds (both for all of them taken together and for those in school) who were in the "other" race category, who did not know their parents' levels of education, and who lived in large cities. All this adds up to recent improvement in reading at younger ages, and no change in achievement compared with previous years for 13 and 17-year-olds.

The Decline in SAT Scores

What, then, are we to say of the decline in SAT scores and the general public consensus that our schools are deteriorating? The Advisory Panel of the SAT Scores Decline found that about two-thirds of the decline in SAT scores between 1963 and 1970 was due to compositional change in the SAT-taking groups. Increased numbers of students from groups that tend to score low began taking the SAT. But there is also consistent evidence of a "pervasive" score decline in the period since 1970 within all categories of SAT-takers. How does this square with the NAEP results? The answer seems to lie in the level of skills in question. On simple skills, students are as proficient as ever. But young people have more problems today with such higher cognitive skills as critical thinking and coherent writing. And the NAEP results show declines in achievement for a wide range of subjects including mathematics, science, and social studies. The SAT Advisory Panel speculates on some of the reasons for this pervasive decline: a diminished seriousness of purpose about education, the deterioration of family life, and so on. This list highlights the absence in society, school, family, and community of an agreed environment in support of excellence.

Functional Literacy

Once again there is a group with a much more particularly serious problem. For them, the phrase "back to basics" does not really fit; they never had the basics in the first place. Another NAEP study, *The Mini-Assessment of Functional Literacy*, reports on a special test of the reading ability of 17-year-olds. Those falling below a minimally adequate performance level on this test were judged functionally illiterate. The results were as follows:

		Percent Literate
Sex:	Female	89.1%
	Male	85.4
Race:	Whites	91.8
	Blacks	58.4
Region:	The Nation	87.4
	Southeast	80.0
Parents' Education:	Some Post-High School	93.9
	No High School	70.7
Location:	Urban Fringe	95.0
	Low-Income Metropolitan	78.5

The low 58.4% functional literacy of young blacks is deeply disturbing. Once again the problem is not so much in the more basic reading skills, such as understanding word meanings and gleaning significant facts (5 percentage points difference between whites and blacks), but in comprehending main ideas and organization and in reading critically (13 points), and most of all in drawing inferences (24 points) (Fisher). Another set of NAEP tests showed that young blacks were better in relation to young whites on written communication (a deficit of 12 points) than they were on manual and perceptual skills (18 points), graphic and reference skills (24 points), and computational and measurement skills (24 points).

Hispanic achievement is also consistently below the achievement of the age group for the population as a whole, and often close to the achievement of blacks. The following table presents the percentage point differences between the achievement of all 17-year-olds and the achievement of white, black, and Hispanic 17-year-olds:

	White	Black	Hispanic
Reading	2.8	-16.4	-11.4
Mathematics	3.6	-19.8	-14.4
Career Development	2.2	-16.0	- 7.6
Social Studies	2.4	-13.6	-13.1
Science	2.1	-10.3	-11.1

Young people at age 17 whose parents had no high school education also had high rates of functional illiteracy (29.3%). For children of parents with some high school, the rate was 23.4%, and for children of high school graduates, the rate was 12.5%. Some postsecondary education for parents halves the rate again to 6.1%. Living in a low income metropolitan area is associated with a functional illiteracy rate of 21.5%.

Further information on the distribution of illiteracy was derived from a brief test given to a nationally representative sample of 12 to 17 year-olds. The results were arrayed into a matrix by age and by grade. Those who were old for their grade, assumed to be repeaters, are four times as likely to be illiterate as students who are in the modal grade for this age, and those behind two years have rates up to seventy times greater (Vogt). Fisher notes the reduction in the illiteracy rates of school children at age 16, and concludes that the illiterate students are dropping out of school. He also notes the very high rates for students in special placement. The illiteracy measure declined from 14% for students in families with under $3,000 income to less than 0.3% for those with family income over $15,000. It was significantly higher for males than females in each race/age group. The decline in illiteracy from age 12 to 17 was not statistically significant.

Data from the Mini-Assessment of Functional Literacy show marked improvement between 1971 and 1975. Measured against a desired performance standard - higher than the level used to define functional illiteracy - 14 of the 20 categories by sex, race, parents' education, and location showed statistically significant improvement. The average increase was 2.2 percentage points, but the improvement was 4.8 points for blacks, 4.0 points for those whose parents had no high school education, and 4.9 points for those in low income metropolitan areas. One of the sharpest improvements, especially for these groups, was in their ability to respond to a help-wanted ad.

Job Requirements and Basic Skills

Little information exists on the relationship between job requirements and basic skills. A Canadian study found "very little evidence to support the proposition that employers are handicapped by the fact that employees lack the basic skills" (Carlton & Hall). Sticht found that military jobs such as cook, mechanic, or supply clerk would require 7th to 9th grade reading skills. He also found, however, that in many cases persons with skills which were apparently far below the job demands were satisfactorily performing the work. (Indeed the relationship between reading and satisfactory performance did not seem to be strong.)

Learning the work may take a higher level of literacy than doing the work. To meet this problem, the Army job trainees were trained in reading the specific materials required to perform their jobs. As they improved their job-specific reading performance, they were also more successful in the training courses as a whole and scored higher on general reading achievement tests. At the same time, the difficulty of the job-training literature was reduced to bring it closer to the reading abilities of trainees.

Getting the job may also require higher levels of literacy than doing it. In part this may be due to the increasing bureaucratization of all institutions (for example, their tendency to rely on formal job applications).

Employers may also rely on indications of literacy as proxies for certain other attributes which are necessary for the job, such as the ability to get along in the work environment. Employers who provide training and promote from within may judge potential for learning and advancement by indications of literacy. Or, such requirements may be unnecessary and discriminatory.

Do Youth Have Poor Attitudes?

Poor work attitudes have also been cited as a major hindrance to hiring youth. Yet attitudinal surveys show no decline in the "work ethic," and they show youth's increasing interest in the intrinsic nature of work itself, not just pay and benefits (Gottlieb, Yankelovitch). The rising labor force participation rates for youth generally, and the responsiveness of enrollments in college majors to shifts in the demand for occupations, is behavioral evidence of the strong labor force attachment of today's young people. Even the typically short job tenure of young people has been shown to be no shorter than the tenure of adults in the same occupation or industry categories. Youth are disproportionately employed in jobs that neither require nor reward long tenure (Berryman). The desire for employment among disadvantaged and minority youth is also strong (Liebow).

What then are the problems that are described as poor work attitudes? *For many disadvantaged and minority young people the problem starts at a very fundamental level - with their basic "belief structure" or perceptual frame of reference.* This orients the individual to the world in terms of optimism or pessimism, self-confidence or self-doubt, and trust or suspicion. These beliefs are usually correlated with each other, but sometimes they are not. These attitudes often work as self-fulfilling prophecies. The person who expects hostility acts in a way which increases the chances he will be treated in a hostile manner. Attitudes at either extreme of these three dimensions can inhibit accurate appraisal of reality. *There seems to be a "tipping point" of optimism, self-confidence, and trust above which a person will try new things, improve his skills, and increase his range of options.* The dropout studies cited above and the detailed analyses by Andrisani all imply that disadvantaged and minority youth disproportionately have low self-esteem, and lack of belief that one's own work and initiative will pay off (Walther). And they show that these psychological variables have a significant independent effect on educational attainment, occupational status, and earnings.

At a slightly less fundamental level are the coping skills, or competencies, which permit a person to function within formal or informal social groups. There are no data, but it seems evident that these are inadequately developed in many young people, particularly those from disadvantaged backgrounds. Walther's list includes self-management, ability to perceive and use abstractions, application of scientific methods to problem solving, ability to see things from a different physical or interpersonal position, ability to deal with aggression under different circumstances, ability to select, organize, and interpret information in ways appropriate to the circumstances, skill in interpersonal relations including appropriately balancing cooperation and competition, and integrating these coping skills into on-going behavior. Persons who have grown up in one environment frequently have developed coping behavioral patterns that may be suitable to that environment but cannot be adapted to employment situations. Glaser and Ross, and Caplan, have studied some of the differences between coping styles in Mexican-American, black, and disadvantaged communities and those helpful in "mainstream" lifestyles and jobs.

Starting from a different perspective, NIE-sponsored research has come up with an overlapping list of transferable skills. They note that each year at least seven million Americans change occupations and another five million change employers but stay in the same occupation. Over 40% of people employed in both 1965 and 1970 reported a different occupation in 1970 from the one they had held five years previously. When occupational changes occur, they are often likely to be shifts between major occupation groups. For every male manager who changed to another management occupation, four left management/administrative work entirely; the corresponding ratio for women was seven to one. Job changing is even more common for youth. Thirty to 40% of the 18-19-year-olds in the labor force are in different occupations from one year to the next. One-half to three-fourths of the male non-school youth change employers at least once in each of the first two years after leaving high school. To accommodate this multi-job experience, the following transferable skills were identified as helpful by employers and research evidence:

problem solving
analyzing
making decisions
logical thinking
understanding others
evaluative thinking
trouble shooting
getting along with others
being sensitive to others
teaching, training or instructing
selling
diligence
flexibility
perseverance
sense of responsibility
self-confidence
self-discipline

Note that in addition to skills a number of interpersonal abilities and attitudes were consistently suggested as required by a variety of jobs (Stump). Indeed, all these traits would seem in varying degrees to be a mix of cognitive and affective qualities, and to involve not only knowledge but behavior.

Know-How for Career Planning

The third set of problems which often result in an employer verdict of poor attitudes - besides "belief structure" and coping skills - is that many young people do not have a very accurate assessment of their own interests and abilities, do not know much about career options, and do not know what is expected of them in the process of getting and holding a job. Most students have inadequate awareness of their own abilities:

only 40% of all 17-year-olds have ever taken an aptitude test (NAEP). Getting a realistic appraisal and relating it to job requirements is particularly difficult for minority youth. A study in San Francisco found that minority students did not know how they were doing on achievement tests, how they compared with other students in the class, or how appropriate their study habits were, although they perceived their teachers to be warm and friendly (Massey, Scott & Dornbusch). This has been confirmed by other studies (Ogbu). Most young people still know little about possible careers, and they are very concerned about this. Data from the NAEP show that the ability to recognize different occupations varies widely.

Many young people seem to wait until they hear about a job, rather than seeking employment (Osterman). The high aspirations of many minority parents are not always accompanied by clear plans to help their children set goals and take the necessary steps to succeed (Hindelang). In writing a letter of job application, 64% of all young people did not include any telephone number or address where the employer could reach them, and 91% did not list any references. The widespread lack of understanding about the wide array of available options and about the process of getting established in an occupation prevents many young people from taking the initiative to find an optimum career path for themselves.

Are Job-Specific Skills Adequate?

Finally, with respect to job specific skills, it is very difficult to assess at the national level whether young people are acquiring adequate skills. Of those youth who had taken training in high school designed to prepare them for immediate employment, 53% of the males and 67% of the females got jobs in which they expected to use their training. Of those who did not get such jobs, 21% changed their work preferences. The success rates were highest in the business office and health areas. The proportion of vocational students who used their training at work was higher than the proportion of academic track students who found their training useful on the job. On the other side of the question, a minimum of one-fifth of those who took vocational training in high school found that they did not have enough skills to quality for work in their field.

Using a broader standard to judge success for young people not enrolled in school, 77% of vocational graduates were employed, compared with 68% of those who graduated from the general track and 56% from the academic track. This indicates that employers felt that such training helped to prepare these young people for work, although the youth themselves did not recognize specific skill applications. It is also possible that, after gaining some employment experience and perhaps additional training, some of those whose first job was not in their specialized field would find such employment later.

Developmental Needs of Youth

The developmental perspective is another useful approach from which to consider ways for improving the employment prospects of youth. From this perspective, each age has certain developmental tasks that extend the physical, psychological, and cognitive capabilities of the individual. Mastery at each level prepares the individual to take on the next stage of development. The various tasks are interrelated, and as a whole they build the identity and lifestyle of the individual. From a developmental perspective, there is no quick fix. Sticht pointed out after his survey of remedial reading programs that none of them had succeeded in advancing reading competence much more rapidly than schools do generally. And change is even more difficult to achieve in affective characteristics.

Pre-School Development and Parent Education

At the preschool and early elementary ages, there are three particular elements of personal development that contribute to, or inhibit, later employability.

- The first is the individual's basic belief structure. This is heavily determined by the mother's earliest responsiveness to and relationship with the baby. It is reinforced or modified by later experiences in the family and in school - for example, the extent to which the child feels valued or finds that he can affect outcomes by his actions. But self-esteem and trust are not easy to develop after childhood experiences that develop their opposites. Patterns of family and social interaction with the child at these early ages affect the coping style that the child develops.

- Second, cognitive development and the search for learning start at these ages. Preschool improvements of perception and coordination are precursors of reading readiness. There is a time for language development, when a child absorbs vocabulary and new concepts more readily than he ever will again. There are some indications that reading comprehension, about which we know little, may be recognition of facts and concepts on the printed page that the child already knows in reality. When the concepts are not already understood, comprehension is much more difficult.

- Third, before they enter school, children have already associated sex and race stereotypes with occupations. (Leifer and Lesser). When a sample of 3 to 6 year old boys and girls were asked what occupation they would choose if they were the opposite sex, 65% of boys and 73% of girls chose sex-stereotyped occupations. Many boys could not imagine what job they would hold if they were girls:

  "(One) put his hands to his head and sighed. 'A girl?' he asked. 'A girl' again. 'Oh, if I were a girl I'd have to grow up to be nothing.'" (Beuf)

There is a substantial body of research literature reviewing programs directed at teaching parents to educate their own children particularly at the pre-school ages. The greatest number of programs, and thus the bulk of the evaluative literature, is for pre-school children, primarily in low-income families. Many of these parent education programs have been shown to be effective - not only immediately upon the child's entrance into school, but also on a longer-term basis. The achievement gains tend to be visible through early elementary school; at later ages, children from programs still retain some advantage in terms of not failing grades and not being assigned to special education classes (Timpane). Programs facilitating the parent as educator at the pre-school level have the following consequences: they result in substantial improvement in children's cognitive functioning, which is cumulative and has a lasting impact; they are especially important in the first three years of life; they benefit all children in the family; and they improve the parent's affective and cognitive functioning. These effects are stronger as the child is helped at a younger age (White, Bronfenbrenner).

In the elementary schools, Title I serves low-achieving students in poverty areas who would not be expected to gain at rates comparable to average students in middle income areas. Data on the short-term effectiveness of Title I indicate that during the school year Title I students gain at a rate equivalent to the national average (one month achievement growth per month in school). *Moreover, Title I students in stable programs appear to gain at a substantially faster rate than the national average.* Data on longer-term effectiveness are mostly cross-sectional rather than longitudinal; they indicate that Title I gains may not be sustained in the later grades. National trends in test scores for children in the early grades have been improving over the last decade, while scores in grades 5 through 12 have been declining. Part of the reason for this difference may be the concentration of Head Start and Title I funds on pre-school and primary school age children (Smith).

Children in the early adolescent years also need and can benefit from compensatory education. Some need help with basic skills because they have not had Title I help; others may not have been ready to gain full benefit at a younger age or may be slow learners; and still others will need practice to retain early gains. But most important, early adolescence is the time when most young people first become capable of what Piaget calls formal operations - abstract and conceptual thinking, which is more powerful than the concrete operations of younger children. Disadvantaged children need extra help to develop this new and important ability.

Although most Title I funding goes to the earlier grades, a small and declining proportion has been used for grades 7 to 9. A study of the effectiveness of these programs concluded that the grade equivalent effects of compensatory programs are about twice as great at the intermediate level (7 to 9) as they are at the primary level (1 to 3). *Present programs are producing the grade equivalent gains required to move participating students in grades 7 to 9 as well as those at the primary level approximately equal distances toward the national norms* (Larson and Dittman).

What Makes an Effective School?

A growing volume of literature on what makes an effective school is coming up with some common themes from studies by educators, economists, and psychologists. *The central focus of the school must be on learning* (Brophy). *Consistency in norms and in their implementation among all pupils in the school is important, so joint planning among the teachers and administrators in each school is helpful* (Rutter). It is helpful if parents and young people also share these norms (Sowell).

The students must be expected to achieve and to assume responsibility. They must be given responsibility, and regularly assigned homework that is marked (Rutter). Teachers must start on time, use the full period and manage the class well so as to concentrate available time on learning (Rutter, Brophy). *Many measures of duration of learning time are significant* (Summers). Mastery of basic skills requires considerable structure. Most learning requires some structure, but older students and other subjects than basic skills require much less (Brophy). *There must be some high achieving students in the school* (Summers and Wolfe, Rutter). *Schools that take students on outings more often and whose staff is available to help students with problems also scored better* (Rutter). Teacher Intelligence (good college, verbal ability) sometimes is positive, and some experience (but not much) is too; but the characteristics of teachers that make a difference are not the ones commonly mentioned in employment contracts.

It is also clear that low achieving students are helped by resources and approaches that are not necessary for high achievers. For low achievers, small classes and small schools are helpful (Summers and Wolfe). Teachers without too much experience are more effective - though we do not know whether this is due to higher expectations for their pupils, more energy and enthusiasm, or what. Low achievers need slower presentation of material, individual monitoring, and "over-learning." *They also need a warm, encouraging, personal approach* (Brophy). In classrooms - and to a greater extent in schools - where these principles are applied, achievement gains are significantly greater. Rutter found that the least able students in the most effective school scored as well on standardized tests as the most able students scored in the least effective school.

The Process of Career Planning

Another aspect of development is career planning. There is much misunderstanding about the nature of this activity. There are fears that career plans, once made, will lock young people in; but career planning is a lifelong process of learning and adjustment - not a one-time event (Hoyt, AIR). Youth is a time of exploration and rapid development which naturally - and constructively - result in job changing. *But an extra volume of changes come about because the original* *decision was not thoughtful or well-informed; young people report many job changes of this sort, accompanied by much unhappiness (Boston). There is also a high economic cost of the "excess" job changes. Studies show that earnings increase with tenure in a firm.* Changing jobs sometimes results in a raise, but it is a risk; and because moves wipe out firm-specific human capital, they are often followed by slower earnings growth (Mincer & Jovanovic). Changing industries or occupations also, as so many people do, wipes out an even larger investment.

What does career planning involve, and what are its effects? Collecting information and making logical decisions are part of the process, usually proximate to some specific action, but these are set within a longer behavioral process of life choice. Developing, assessing, and setting priorities among one's value, interests, and abilities are important elements of this process. So is learning to understand many kinds of work activities and organizations and the economy and society in which they operate. *Discussion with people having a wide variety of experiences, watching their activities, and trying out roles are essential to getting a feel for the fit between oneself and any potential career.* The cost of much wider and more systematic exploration of careers in elementary and secondary schools is very small. The cost of "excess" job changing at later ages is much higher. *Moreover, career exploration provides a unifying and motivating theme for education, especially for those young people whose family does not stress academic achievement.* This has proven to enhance basic skills achievement (Bhaerman, Booth). It may also increase the number of youth who get a "running start," in careers at a time of life when - as other societies have found - their energy, enthusiasm, and creativity are especially high.

Task of Adolescence

Early adolescence is a crucial time for career decisionmaking. During early adolescence, young people are typically very concerned with how other people see them. Their self-esteem is fragile during this period. Their new cognitive ability lets them "put themselves in someone else"s place," and this psychosocial change makes them very self-conscious. They also become able to envision such abstractions as the society and the economy, and are exploring their place in these entities.

The need for identity development and career exploration continues in later adolescence. Young people want to try adult roles, to develop and test their coping skills in an adult environment, to explore social institutions, and to develop their values. They are struggling to establish independence from childhood institutions -- the family and the school. The key question in late adolescence is: What can I achieve? This is a time when most young people seek extracurricular activities and work experience - both of which are predictive of employment success. To meet part of this need, various forms of experiential education are expanding. Understanding of the purposes and rules for effective implementation of experiential education has become very much more sophisticated in recent years. But the more sophisticated approaches are still being applied on a relatively small scale, although two-thirds of all high schools now offer credit for work experience or off-campus occupational training programs.

Change during adolescence is greater than at any other time of life except early childhood. Physical, psychosocial, and cognitive development is rapid. At a given chronological age, some young people are very much "older" than others. For any individual, some aspects of development may be much more advanced than others. This lack of synchrony can be poignant. Given this diversity, it becomes much more difficult for schools to meet the needs of all young people within a uniform environment. Moreover, social pressures are encouraging young people to become "adult" sooner than they used to in some respects (sexual activity, awareness of the world, economic activity, and responsibility for self and others) and in other respects, to remain "kids" longer (late exit from formal schooling, late entry into primary employment, and late marriage). Minority youth from low-income families are particularly likely to bear and rear children in their early adolescence and to postpone part-time work experience and full-time employment until much later than is typical for other young people (Datta).

From a developmental perspective, it is clear that the best approach would be early and continuing intervention to help young people reach their maximum potential. Remediation in later years has some effect, but it requires a very great intensity and duration of resources, preferably involving the *whole school and peer group. Remediation should probably start in junior high school, before the young person has started to break away from childhood institutions.* Continuity is important, which might suggest linking up such existing programs as Head Start, Title I, Special Education, and Vocational Education. The diversity of adolescents' needs also suggests that modular services ought to be provided to help with a youth's development - by school, CETA, etc.-which could be readily combined in a way to fit individual needs.

Finally, young people's desire for achievement and responsibility might lead us to regard them as a resource. Cross-age tutoring and child care have proven very effective both for those who are helping and those who are being helped; such activities could sharply lower the cost of a start-from-the-beginning approach. Young people could contribute to many other public and private, social and economic activities. Indeed, as they became more of a resource in practice, they might be less of a problem.

Discrimination: Harmful and Helpful

Throughout this paper, many instances have been noted where the conditions and experiences of minorities differ from those of youth in general. This section deals with the particular needs of minorities, identified by studying what helped the more successful black youth, what might help other young blacks, who face serious problems, and what might improve the different experiences of Hispanics and of young women. It also includes their common need to break away from sterotypes and to be seen and accepted for their individual characteristics.

Lessons From Black Success

For many black youth, education has been a major route to employment stability, occupational prestige, and higher earnings. The educational attainment of blacks has been rising much more rapidly than that of whites. By the late 1970's, the black and white distributions of educational attainment began to converge; enrollment rates for nonwhite youth at every age are now close to or above the rates for white youth. Blacks' educational aspirations are higher than whites'. The main restraints on additional higher education for black youth are the lower educational attainment of their parents, their lower family income (which particularly limits long postsecondary education), and the need for better preparation at the elementary and secondary levels (McMahon).

Although an education gap remains, not only the years of schooling but the quality of schooling for blacks has been rising relative to that for whites. The parents of many of today's black youth might have attended, for a term four-fifths as long, a segregated Southern school in 1940 with one-third the per pupil resources of the average Southern white school; by the mid-1950's, the term would have been as long, and the average resources 61% of those in the white school. Scattered data show rising relative resources for blacks, North and South, since that time (Welch, Weinberg). More significantly, the National Assessment of Educational Progress shows that educational achievement levels of blacks are rising relative to those for whites, particularly for the youngest cohorts (NAEP).

These relative gains in the amount and quality of schooling seem to have been accompanied by diminished discrimination in the labor market in recent decades, especially for those at higher levels of schooling. Admittedly the differences between black and white men in occupational prestige and especially earnings at each level of education are still large (Jencks, Osterman, Smith & Welch, Smith, Freeman). However, the gain in occupational prestige for an additional year of schooling is higher for blacks than whites both for the lowest level of education and for the highest (Jencks, Karwert). Likewise, gains in earnings for college graduates rose faster for blacks than whites during the 1960's and then held level while the returns for whites turned down, so that returns to college for recent cohorts of blacks are now higher than for whites (Smith, Endicott).

When all occupations are classified into Holland's six categories, one of the job families - sales, management, and other enterprising work - is found to provide higher earnings at each level of education than does any other job family (except investigative work - scientific and medical - for people with more than 16 years of education). This higher-paying job family, enterprising work, engages one white man in every four between ages 36 and 65, compared with only 5% of black men in this age group. The contrast is sharp at every level of education. Similarly, 7% of whites are in investigative work, the next most lucrative job family, compared with 2% of blacks. Blacks with higher levels of schooling are much more likely to be found in social occupations -- teaching, health services -- which are low-paying, though often prestigious and secure. These patterns presumably originated in past patterns of discrimination. However, social occupations are still emphasized in blacks' vocational interest inventories and their college majors. Thus, in order to get better jobs black youth should have more opportunities to learn about and experience entrepreneurial settings (Gottfredson). In this context, it is interesting that the occupations of black entrants into the labor force in the 1960's were more congruent with those of whites than with previous cohorts of blacks (Smith & Welch).

What will happen to the earnings of these young blacks as they gain more experience in the labor market? Based on cross section data one might infer that the earnings of blacks do not rise much with increasing experience. But several recent studies have found evidence of a "vintage effect." Each younger cohort, starting with better family and educational background and facing less discrimination in the labor market, seems to be on a steeper lifetime earnings trajectory (Smith &

Welch, Smith Flanagan). Within a cohort, black-white male wage ratios have, if anything, increased during the career, especially for workers with more schooling (Smith). Karwet found that the gains of blacks relative to whites in occupational prestige associated with an additional year of schooling were enhanced with additional months of labor force experience, and that the returns in prestige for experience itself was greater for blacks. She interpreted this as meaning that employers want additional information on the employability of blacks which is supplied by labor market experience. Another study found that within a given cohort over time, the returns to experience declined for blacks with only elementary or secondary schooling, but rose for black college graduates (Smith & Welch). A caution is sounded in a recent article by Lazear, which indicates that recent cohorts of blacks may be receiving less on-the-job-training in relation to whites than previous cohorts.

It is clear that the trend toward equalization for black women has proceeded much further than for black men. For workers of all ages, the median wages of black males rose from 59% of those for whites in 1955 to 73% in 1975. For women, the same ratio rose from 43% to 97%. One-third of the rise in the women's ratio is explained by converging characteristics, primarily educational attainment. (Of all blacks enrolled in college, 53% are women; for whites, the ratio is 39%.) Another 20% of the improvement is due to black women moving into higher paying government employment or sectors influenced by government, and 12% to shift from part-time to full-time work. Black women are now less likely to be part-time than white. The major shift out of domestic services during the 1960's also helped; the proportion so employed fell from over one-third to 14% for married black women of all ages and from more than 25% to less than 3% for those aged 21 to 25 (Smith).

In sum, since the 1960's blacks at the highest levels of education who have most recently entered the labor market have increased their earnings relative to whites, and black women have almost achieved parity with white women (Smith & Welch, Smith). In addition to the factors noted above, mobility accounted for about 9% of the narrowing for both men and women. Within the South, where the gap had been widest, it narrowed most -- partly as a result of movement from rural areas into cities. No effect of affirmative action was found in government and government-influenced sectors which were assumed to be more affected by enforcement (Smith & Welch). Black-white wage differences narrowed more sharply in the private sector. However, by the 1960's more general public and employee pressures less directly dependent on government enforcement could have been pushing business to catch up with public standards.

Black Youth Without Jobs

Turning from those young blacks who are finding employment -- and whose relative position seems to be improving -- to the substantial and apparently growing proportion of black youth without jobs presents a paradox. Given the improvement for some black youth, why has the unemployment rate of black youth been rising relative to that of whites for 25 years? Why has their labor force participation rate been declining, while the rate for white youth has been rising? What can be done about these trends? In this crucial area, there are no firm answers. We can only lay down information and draw reasonable inferences.

From 1940 to 1970, there was a massive migration of black people out of the South to the Northeast, North Central, and Western States. This ceased in the 1970's but the concomitant flow from nonmetropolitan to metropolitan areas did not. Between 1950 and 1976, while the proportion of the white population living in metropolitan areas rose slightly from 63% to 66%, the proportion of blacks shot up from 59% to 76%. In 1950, there were nearly as many blacks in nonmetropolitan areas as in central cities; by 1976, the proportion in cities was twice the proportion outside metropolitan areas. The underemployment of small towns and rural areas (supplemented by odd jobs and a garden) becomes more visible as unemployment in the city. Moreover, Sowell considers unbanization a key milestone in the development of ethnic minorities. It is not merely that certain job skills are lacking, he says, but that whole patterns of behavior formed to meet the conditions of rural living must be changed to meet vastly different conditions of urban life. A mass of new information must be assimilated about how the urban world functions. No major immigrant group has mastered this in less than two generations. Thus, employment/population ratios of blacks in non-metropolitan areas are higher than those in metropolitan areas (Berryman).

A much larger proportion of blacks (29%) than whites (9%) are poor. Poor blacks are heavily concentrated in "poverty areas," defined as locations where more than 20% of the population is poor in contrast to the average of 11%. In metropolitan areas, 60% of all poor blacks, but only 21% of poor whites, live in poverty tracts. In non-metropolitan areas, 81% of poor blacks, but only 43% of poor whites, live in poverty areas. Living in a poverty area does not lower the employment/population ratio much for whites or Hispanics, but for blacks the ratio plummets from an overall average of 52% to 35% in poverty areas.

Poor people tend to have larger families than those with higher income. In the lower income brackets, black families have more children than white families at the same income level. In upper income brackets, the reverse is true -- black families are smaller. "Only children" or first-born children tend to be overrepresented in studies of "success"; conversely half of the black men who failed the U.S. Army mental test came from families with six or more children and three-quarters from families with four or more. Moreover, a study of ethnic groups throughout American history concluded that all ethnic groups in which men experienced relatively greater difficulty than women in getting dependable employment -- including urban blacks, Puerto Ricans, and Irish -- commonly had family break-up and "macho" behavior (Sowell). These patterns disrupt children's learning and development.

Another factor affecting disadvantaged black youth is that this "immigrant" group is trying to make the transition to urban employment under relatively complex circumstances. In former decades, "piece-work" employed people with widely varying productivity and served as a transition while they developed urban and job-specific skills. Today, the prevalence of large organizations, bureaucratic practices, internal labor markets (which require evidence of potential for career advancement as a prerequisite for entry-level jobs), and greater need for abstract thinking are considerable barriers for the disadvantaged. Thus, young black men with little schooling tend to compete among themselves and with other secondary workers for secondary labor market jobs; when these are inadequate to absorb the supply of youth, there seems to be little penetration into the primary sector (Osterman, Freedman).

The effects of complex circumstances, the urban adjustment problem, and sterotyping of blacks adds to the pressures for more schooling and/or work experience credentials for black youth. Thus, a much larger proportion of black than white youth with less than or only a high school education who are out of school are also out of work. Of those not enrolled in school, only 25% of black dropouts but 46% of whites were employed; for graduates, the figures were 35% for blacks and 60% for whites. Since the mid-1960's, the employment/population ratio for out-of-school black dropouts has fallen from 44% to 25%, while the ratio for white dropouts has held level. For graduates, the differences in black/white employment/population ratios held constant (Kohen & Andrisani).

Interest in Education Achievement

Young people's interest in educational achievement is influenced by their perception of opportunities, by family beliefs and encouragement, by teachers' expectations, and by their own experience of success in school. Autobiographical literature indicates that from the earliest grades many poor minority children see little purpose in educational achievement (Claude Brown, Piri Thomas). In rural areas, their families' efforts are often intermediated by weather or market changes; in urban poverty areas, there is little diversity of role models or experiences to help students visualize -- and relate to themselves -- an array of employment opportunities. Racial occupational sterotypes and their expectation of discrimination compound the problem of preparing youth for a changing world. Although the school situation, rather than consideration of future employment, is the proximate cause of most decisions to drop out, satisfaction with and success in school -- including improved basic skills -- can be enhanced by combining basic skills instruction with career education (Bhaerman, Booth).

When parents have little education, and especially when they do not set high value on preparation, work, and saving for future rewards, young people may lack family psychological support to stick out "the grind." It is not uncommon for teacher pressures for homework assignments to be met by angry parent demands to "stop hassling my kid." Poor families may even hold up a school dropout with some earnings as a "good example" for a talented youth trying to stay in school (Sowell). In any case, the family may not have the experience to judge the kind and amount of activity necessary to attain educational or career plans (Hindelang). Generally, the black communities (like the Irish in the past) place more emphasis on group or political action to achieve success (Sowell).

It is well known that teacher expectations have a significant effect on achievement in school. When a few students, chosen at random, were identified to teachers as having the greatest potential for improvement during the year, those students gained more than would have been predicted by their previous work (Gagne). This has particular relevance for blacks. Studies have shown that standards of achievement are not made clear to them, and that teacher feedback is unrelated to improvement or deterioration in their levels of achievement (Massey, Scott & Dornbush, Ogbu). They are often not pushed toward excellence. Those who have achieved the most, though they may be poor, are sometimes "skipped over" for scholarship aid or college entry on the ground that these should go to more disadvantaged youth, thus weakening the incentives for achievement. Some of those who, during the late 1960's were admitted to colleges that usually required better preparation than they had, suffered considerably in making the adjustment and often lost self-confidence. However, *when the standards are known in advance, and students have adequate help with preparation, many disadvantaged students show substantial gains in achievement* (Sowell).

At the point of transition to work, then, many disadvantaged young people do not have a strong sense of reward for achievement or an orientation to the future, have not explored career options in relation to an awareness of their own abilities and often have little discipline for sustained academic achievement. In part, because there are fewer opportunities in poverty areas, they do not start early to build a record of work experience along with schooling. There are also indications that some young blacks feel that jobs of the sort taken temporarily by white youth to earn money and build a work experience record would tend to identify young blacks permanently as secondary workers (Piore). *When blacks do have work experience, it is likely to be through CETA or other public programs. And they have fewer contacts of the sort that would provide them with information about job openings or assistance in getting hired, particularly for better jobs.* Thus, Becker reports that a higher proportion of black than white youth found their current job through a public agency such as the Employment Service, and a higher proportion of white than black youth were offered a job before they took any action to find one.

Hispanic Education and Earnings

There are less data on which to base a discussion of disadvantaged Hispanics. The Hispanic population numbered about 11 million in 1976, compared with about 24 million blacks. Of all households in the U.S., Spanish is the main language in 2.0% and is the second language in 2.3%. Except for English, no other language approaches these proportions of use. *The Hispanic-origin population may be the fastest growing minority in the U.S. As a result, the median age of Hispanics is very low -- just 20.1 years compared with 23.8 years for blacks, 29.8 years for whites*, and 36-39 years for people of Western European birth. Fully 35% of all Hispanics are less than 13 years old, compared with 29% of blacks, and 22% of whites. Twenty-two percent of Hispanics are in the 14 to 24 year age bracket -- a proportion that falls between the 24% for blacks and the 20% for whites.

Hispanics, too, are immigrants to metropolitan areas in the U.S. We do not know how long they have been in urban environments. But by 1976, 77% of Mexican-origin, 97% of Puerto Rican-origin, and 91% of other Hispanics were living in metropolitan areas. An overwhelming 82% of those from Puerto Rico but only 43% of those from Mexico (compared with 58% of blacks) were in the central cities. A high proportion of Hispanics are poor. However, poor Hispanics are not so heavily concentrated as blacks in poverty areas; only about half of poor Hispanics are found there.

The educational attainment of Hispanics is much lower than that of blacks. Nearly 7% have less than five years of school, compared with less than 1% of blacks. Only 55% have four years of high school or more, compared with 74% for blacks. The attainment of Hispanic women is lower than for men; the reverse is true for blacks.

Currently about 2.8 million Hispanics are enrolled in public elementary and secondary schools, and the number is growing at an average annual rate of 3.3%. This enrollment is concentrated in ten States. Hispanics constitute an average of 21% of the school enrollments in Arizona, California, Colorado, New Mexico, and Texas; 13% in Connecticut, Illinois, New Jersey, and New York; and 7% in Florida. Elsewhere their proportion averages 1%. (In contrast, black enrollment is 6.8 million, is not growing, and is spread much more evenly among the States.) For specific age groups, a smaller proportion of Hispanics than whites or blacks are enrolled in school, particularly in the pre-elementary ages and from age 14 on. For example, the proportion of Hispanics aged 16 and 17 enrolled is 81%, compared to 89% for white and black youth.

Those Hispanics who do stay in school despite language and other problems do somewhat better than blacks in educational achievement. They test about the same in science and social studies, somewhat better in reading and mathematics, and considerably better in career development. In all subjects, they are well behind the average for all youth.

The employment/population ratio for Hispanic youth is 47% compared with 52% for black and 62% for white youth. In poverty areas, however, the Hispanic ratio of 45% is well above the 35% of blacks. About 24% of all Hispanics are poor, compared with 29% of blacks and 9% of whites. Hispanics' median income is 72% of average. However, those figures are depressed by the very young age distribution of Hispanics and, for the proportion in poverty, by their large family size. For example, in 1970 in each age bracket, the income of Hispanics was above the average for blacks, though not (except for the youngest bracket) above that for Northern blacks.

Clearly, there is a need to lengthen the educational attainment of Hispanics, by providing ESL and compensatory education services. There may also be a particular problem for Hispanics in the teen ages. For whites and blacks, the proportion of students enrolled 2 or more years below modal grade doubles (to 2.9% and 6.8%, respectively) for 14 to 17-year-olds compared with those aged 8 to 13, but for Hispanics the proportion triples to 9.4%.

In addition, the returns to education for Hispanics may also be lower than average. One study found that the earnings of native-born white males with at least one foreign-born parent were almost 12% higher than for those with two native-born parents. About half of this was due to the fact that those with foreign parentage were less likely to live in a rural area or in the South. If a language other than English was spoken in the home when the person was a child, earnings were lower by 2 to 5%. When country-of-origin dummy variables were added to the foreign parentage equation, only Mexico was significant. With education, experience, and other variables controlled, earnings were lower by 18% for those with Mexican parentage. White men with native-born parents having a Spanish surname and living in the Southwest had an even lower coefficient, but it did not differ significantly from the Mexican origin effect in the foreign parentage analysis (Chiswick). This suggests that some of the problems faced by disadvantaged blacks may also be faced by Hispanics, and that similar strategies might be helpful.

Women's Experience

The problem for young women is much different. Women have slightly less educational attainment than men -- a median of 12.3 years of schooling compared to 12.5 years. They are less likely to drop-out before elementary school graduation

(10.3% compared to 11.6%) but less likely to go on to college or above (23.7% compared to 32.4%). Their educational achievement at age 17 is better than males in writing, reading, literature, and music; it is worse in science, mathematics, social studies, and citizenship.

The major problem is that women are concentrated in "women's occupations" -- whether in major fields like clerical or in specific titles in specific companies (Osterman). The increase in women's labor force participation in recent decades has tended to increase competition among women. This has tended to drive their relative wages down. There has been some increase from a small base in the preparation of women in nontraditional fields like engineering and science. There has also been some increase from a small base into nontraditional managerial and craft occupations. But the greatest number of women still prepare for and enter traditional fields. Occasionally, women enter a nontraditional occupation -- usually one with declining demand -- and it "slips" to become a woman's occupation (Osterman). Women are little represented in the key departments -- the editorial office of a magazine or the business loans division of a bank (Osterman).

Earnings of women with higher levels of schooling have risen sharply during recent years. They are equal for black and white women at the elementary and secondary levels, but higher for black college graduates (Smith). Starting salaries for recent graduates of higher education are close to, and occasionally surpass, those of men (Endicott). But even dedicated career women, with equal labor force attachment, tenure, and attendance, have lower earnings than comparable men (Osterman). Another study found that 11% of the wage gap between white men and white women was due to the smaller amount of on-the-job training received by women, 11% was due to other differences in tenure, and 8% to differences in the proportion of full-time work. But 56% of the difference could not be explained by any of the adjustments for different characteristics or experiences (Corcoran & Duncan).

Special Needs and Targeting

"Special needs" is Federal parlance for the particular kind or intensity of services required by one population group in contrast with other groups. Yet educators and other professionals, who use the phrase in appealing for Federal funds, know that there is easily as much variance within most groups as between them. The really "special" needs are the unique ones of each individual; these are the hardest to meet in large institutions with scarce resources. The problem is particularly difficult if the goal is to provide the necessary support so that every young person -- or nearly every one -- develops employability. This will require alertness for emerging problems, specificity in diagnosing causes understanding of the variety of means for enhancing development -- including the basic fact that development is not something that a professional does to a young person -- and continuity and articulation of assistance.

Early and Specific Diagnosis

A good example of the need for alertness to emerging problems would be early identification of potential dropouts. Jencks shows that tests of academic achievement in the sixth grade predict educational attainment and earnings as well as later tests. Yet Elliot and Voss found that teacher estimates of dropout potential were less accurate than naive models. Catching the problem early is extremely important. Both Bachman and Elliott feel very strongly that retention campaigns are a great mistake. By the time of the dropout decision, the pattern of school failure, lack of encouragement, and alienation from constructive activities has built students' frustration to the explosion point, and the students' feelings and behaviors are very hard to change. Even if an incentive proved strong enough to keep such youth in school, they might disrupt the learning environment for others and for themselves and they might gain less in employment and earnings from graduation than due the average student.

However, early and continuing help in solving school problems, more encouragement from parents and teachers, and enriched opportunities to belong and achieve could change the basic orientation of potential dropouts in time to prevent them from becoming enmeshed in patterns of failure. Studies have shown that the factors which lay the groundwork for dropping out also contribute to delinquency, and to running away, to drug and alcohol abuse (Elliott & Voss, Bird, Gold, & Mann, Cohen). Other studies have shown that increased opportunities for achievement and recognition can diminish delinquency and drug abuse (Short & Strodtbeck, Hendrick). Such strategies might also have some effect in reducing the prevalence of early pregnancy.

Specificity in diagnosing causes is necessary for all young people who are having problems in school. But it is most essential in providing education for the handicapped. Phrases such as "learning disabled" are broad categories -- labels -- which explain nothing about the particular nature of and reasons for the individual's problem. The Parents' Guide to Learning Disabilities by Joanna Fisher cites many examples of children thought to be "dumb" or "behavior problems" until specific difficulties were identified. For example, some children who easily can pass the Snellen Chart vision test have trouble focusing binocularly on a near object or tracking across the page, both of which are required for reaching. A child who has never seen "properly" may believe "that's the way the world looks," and only belatedly provide clues that something is wrong. Diagnosis and assistance are even more difficult for children with problems in interpreting perceptions or those with different patterns of brain function such as lack of strong hemisphere dominance. Much research is needed into such problems. But parents, who should be the first to note something wrong, and professionals at the local level, including teachers, counselors, and doctors, are often unaware of the clues to such difficulties, the means of diagnosis, or the potential for amelioration.

Alternatives for Development

The varied means for enhancing development include a number of "alternative education" programs which have proven effective. Gold cites two characteristics which many such programs have in common. One is provision of a warm, accepting relationship with one or more adults. Staff on such projects generally try to establish a more informal and personal relationship with individual students than is common in larger schools.

The other is design of circumstances that increase the proportion of a youth's experiences that lead to success. Elements of such design include assigning materials and tasks appropriate to the student's present level of skills; including content that appeals to the student's interests; allowing the student to master materials at his or her own pace; and comparing progress with the student's own past performance rather than with the norms for grade or age. *Increasing the proportion of student successes need not be incompatible with setting high academic goals so long as care is taken to start where the student is and help him to master each step along the way.* Indeed, it is questionable whether self-confidence can be built, in the long run, unless students feel that they have accomplished something difficult. *Clearly, low achieving students need more encouragement and benefit from more individual attention. These can be provided as compensatory education in the regular school system or as an alternative remedial program. Either way, the additional teacher time and attention requires additional resources, but this may be a good investment.*

There are many other environments besides academic classrooms in which young people can develop cognitive/academic abilities, as well as affective and manual skills and particular talents.

- Students who are attracted to vocational education seem to differ substantially in values and other characteristics from those in the academic and general tracks, and they are happier with school than other students (Echternacht). *Young people attracted to career goals and concrete approaches can learn basic skills and other academic subjects through vocational education;* some exemplary projects are stressing this combination (Law).

- Programs for the gifted and -- at the other extreme -- many exemplary CETA projects start with an assessment of a much wider array of abilities and talents than most schools consider. Many of these talents are known to be uncorrelated with each other, so such evaluation has a good chance of finding at least one area of potential achievement for each young person. Such programs then "lead from strength." In the case of CETA, particularly, *they build confidence by encouraging accomplishment in the area of the young person's best talent. Such real contributions can bolster self-esteem enough for young people to try again in areas of failure.*

- Perhaps the longest running competency-based programs for developing a wide array of talents are the Girl and Boy Scouts. These, along with Vocational Education Clubs and many extra-curricular activities, develop coping skills and leadership.

- Another effective approach is experiential education. This is being used for values clarification, motivation, skill development, implications assessment, application, synthesis, evaluation, and memory in a wide variety of disciplines, including most professions (Keeton). As with any educational program, experiential education requires development of program goals which are made clear to all participants, and the identification or design of "curriculum" to help participants achieve them (Miguel). The majority of the nation's high schools now offer academic credit for off-campus work experience or training (64%), independent study projects (60%), correspondence courses (54%), or college courses (53%), and smaller proportions offer credit for other kinds of education, by examination, or for volunteer work or travel.

Targeting and Accountability

Who is in need of the services to develop employability discussed in this and prior sections? All young people need additional help with career planning. But those in greatest need of the widest variety of services are youth from low income families with low educational attainment, and particularly Black and Hispanic youth. These young people need support for development from birth through career establishment. The most acute needs start in the late elementary grades and continue through the transition to full-time work or postsecondary education.

Harmful Side Effects

From a developmental perspective, however, targeting developmental services on particular young people has far more harmful side effects than targetting, say, income support or education grants and loans. Participants in "special programs" often are taunted by other children, labeled in official records, and lowered in their own self-esteem. The harmful effects of negative labels and low self-esteem include higher rates of delinquency and lower earnings (Elliott, Andrisani). Such programs also amount to a form of segregation. There is less likelihood that the group will include adequate "levening" of youth with high academic achievement, which school effectiveness studies have shown to be significant for all youth, disadvantaged or not. Fewer families are likely to press for academic excellence. Networks of role models and employment contacts through parents of classmates will be limited. Thus, Mangum and Walsh in their evaluation of CETA programs conclude that "...*most programs directed solely toward the hard-core disadvantaged, or those that isolated the hard core, have been failures.*"

What can be done to ameliorate these side-effects? *One approach is to target on specific areas -- for example, poverty areas with low youth employment/population ratios -- rather than on individual people.* There are additional arguments for this approach. Poor youth in more prosperous areas should be helped by more advantaged peers, a stronger resource base for support of education and other services, and more employment opportunities. Moreover, programs which involve whole schools seems to be more effective and more durable than projects involving only some students within the school. This ties in with another approach to ameliorate side-effects of targeting. *Eligibility criteria should not limit the program only to poor children or low-achieving children.* Wherever possible whole schools should be involved. In other instances, a substantial proportion of "not-otherwise-eligible" young people should be admitted to the program. Only in the case of income support or tuition assistance should strict targeting be the rule. And finally, programs should work specifically to offset the disadvantages of labeling and segregation -- by strategies to raise self-esteem, develop support for academic achievement, and broaden contacts in the business community.

Who should be accountable for the effectiveness of these services? Given the diversity of needs, the combinations and continuity of services involved, and the variable timing of development among youth, this is a very difficult problem. Teacher accountability has been a bone of contention wherever it has been raised. In practice, it may increase the authoritarian and bureaucratic tendencies in schools, both of which are particularly harmful to disadvantaged students. Student accountability is decried as "blaming the victim."

One answer might be joint responsibility, reviving the image of teaching as a "helping profession."

Individual education plans -- by whatever name -- can be seen as a much more sophisticated version of joint responsibility. These were popularized by the Education of All Handicapped Children Act, which requires that such a plan be developed for every handicapped child. Initial reports indicate that this requirement is being implemented smoothly. However, only a small proportion of school children are affected, and their needs are obviously individually distinctive. The idea is included in Title I of the Elementary and Secondary Education Act as an option, and is a key provision of the Consolidated Youth Employment Projects being highlighted by the Department of Labor. One State education official identified what may be the key factor determining the success if IEP's: in communities where they were regarded as more bureaucratic paperwork, they had no effect; *but where the IEP provided a focus for discussion among the young person, his parents, teachers, and other helping professionals on goals and next steps for that individual, they were very effective.*

Youth Employment: An Educational Perspective

A review of the analysis reported above seems to lead to the following lessons for the development and selection of policies to improve youth employment.

- Most of the resources should be focused on the one-tenth of all youth who suffer substantial unemployment and difficulty getting established in the primary labor market.
  - It would be more effective to involve the whole school, peer group, and neighborhood in improving employment prospects for these disadvantaged and minority youth.
  - It would be less effective if low-income and/or low-achieving youth are singled out from their peers for "special programs."
- Preventing dropout, per se, is not an answer, but trying to reach the root causes of dropping out would be one approach. This might include any or all of the following:
  - Parent education, Home Start, involving youth as care givers and tutors, involving parents in supporting excellence in the school, and providing courses for parents.
  - Improvements in local diagnosis capability to catch earlier -- before the child experiences substantial failure -- and to define more precisely the handicapping conditions of learning or family problems which are hampering a child's ability to learn. This will require in-service training of teachers, counselors, doctors and other specialists.
  - Build on the attraction of vocational education programs for many young people with concrete, experiential learning styles, or who are motivated by the attraction of employment. Increase teaching of basic skills and of transferable and prevocational skills in vocational education and ensure the acceptability of graduates with local postsecondary institutions.
  - Establish alternative small schools within the school system with smaller classes, warm and personal attention, and some focus of interest which would permit students to demonstrate their strengths as well as improve their basic skills.

- Improving the employability of disadvantaged and minority youth will need to be linked with a concerted effort to help them to make the transition to primary employment. A strategy to accomplish this might include:
  - Strong enforcement of affirmative action programs in the local industries which employ white high-school graduates.
  - Better linkages between schools and the labor market, including the development of an Education-Work Council including representatives of large and small business, who would review and try to ameliorate problems these youth face in making the transition to primary jobs.
  - Exploring the possibility of developing an "opportunity structure" within the community that would reward good performance by providing help in gaining the next step.
  - Improving the credentialing of these young people to stress the individual characteristics and competencies of each youth. Help them to build work histories with letters of recommendation.
  - Starting an early program of career education to help these youth to broaden options, particularly in the higher-paying entrepreneurial and investigative occupations, to learn how most young people take the initiative in making the transition to work, and to develop the necessary job-seeking skills.
  - Providing technical assistance to communities that want to increase the sophistication of their experiential learning programs.
- All youth need assistance in making better informed career choices and in developing coping skills. Communities should be encouraged to provide many of the above services for non-disadvantaged youth.

THE YOUTH EMPLOYMENT PROBLEM: A SEQUENTIAL AND DEVELOPMENTAL PERSPECTIVE

Robert Taggart

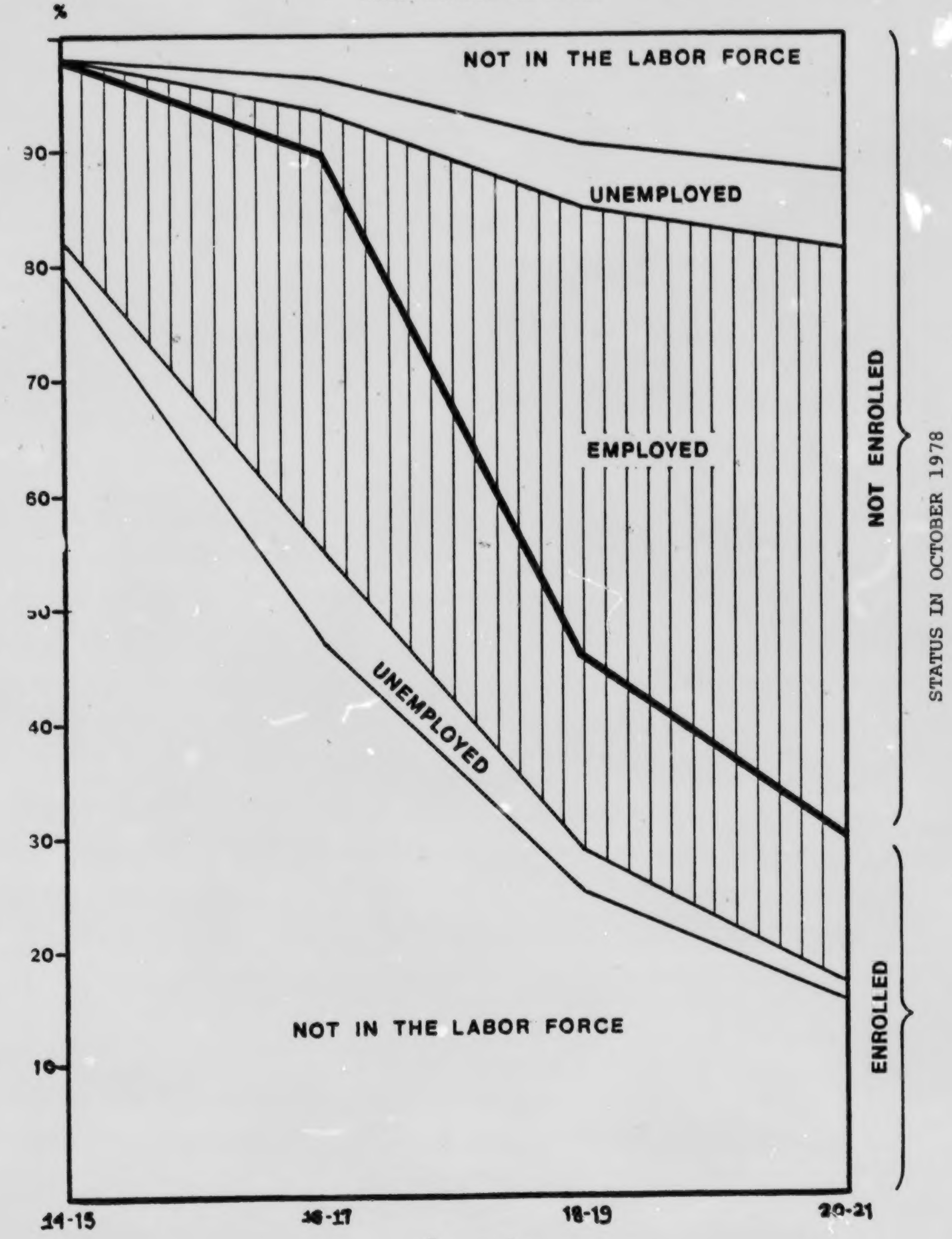
OFFICE OF YOUTH PROGRAMS

Bureau of Labor Statistics,
Survey of School Age Youth

CHART 1

YOUTH IN TRANSITION

FROM SCHOOL TO WORK



Pathways of Career Development

The youth employment problem is multi-dimensional. There is not one problem but an interrelated set of problems paralleling the development and transition process which occurs for almost everyone from age 14 to 21. Youth employment problems cannot be addressed without understanding of the general patterns of development and transition which are positive and constructive for most youth.

The teen years are a period of dramatic change. At age 14 and 15 almost every young person is in school, neither seeking nor holding a job; even in the summer, less than a third look for work. Chart 1. Jobholding begins to increase at 16 and 17 among both students and the minority who drop out of school at this age. On the average, half of 16- and 17-year-olds are working or looking for work during the school year, with the proportion increasing to three-fifths during the summer months. At age 18 and 19, most students leave high school, either going on to college or full-time employment. Seven of every ten males and a lesser proportion of females at this age hold or look for jobs, and one of every three has completed formal education. Finally, by the early twenties, most young people are employed and self-supporting. Less than three of ten are outside the labor force, with half of these still in school and most of the rest keeping house.

During the critical years of transition, young people become more committed to work. They seek more permanent and rewarding jobs as they look to the future. Only a seventh of all 16- and 17-year-old workers hold full-time jobs compared to three-fifths of employed 18- and 19-year-olds and four-fifths of workers age 20 to 24. Conversely, nearly half of all 16- and 17-year-old workers hold part-time jobs for less than half of the year compared with just a fourth of 18- and 19-year-olds with work experience and one in ten 20- to 24-year-olds.

The shift from part-time intermittent work to full-time year-round employment is achieved through frequent job changing and penetration into new occupations. There is a significant change in occupational and industrial employment patterns over the teen years. Chart 2. Sixteen and 17-year-olds are concentrated in sales, service and laborer occupations, while 20- to 24-year-olds are more likely to be clerical, professional or technical workers. There is a shift from wholesale, retail and private household work to manufacturing and services. These changes are observable for both sexes though they are much more extreme for males.

The increased stability of employment and changed occupational patterns results in higher earnings. In May 1978, the mean wage of 14-and 15-year-old workers was $1.87 compared to $2.54 for 16- and 17-year-olds, $3.22 for 18- and 19-year olds, and $3.81 for youth age 20 and 21.

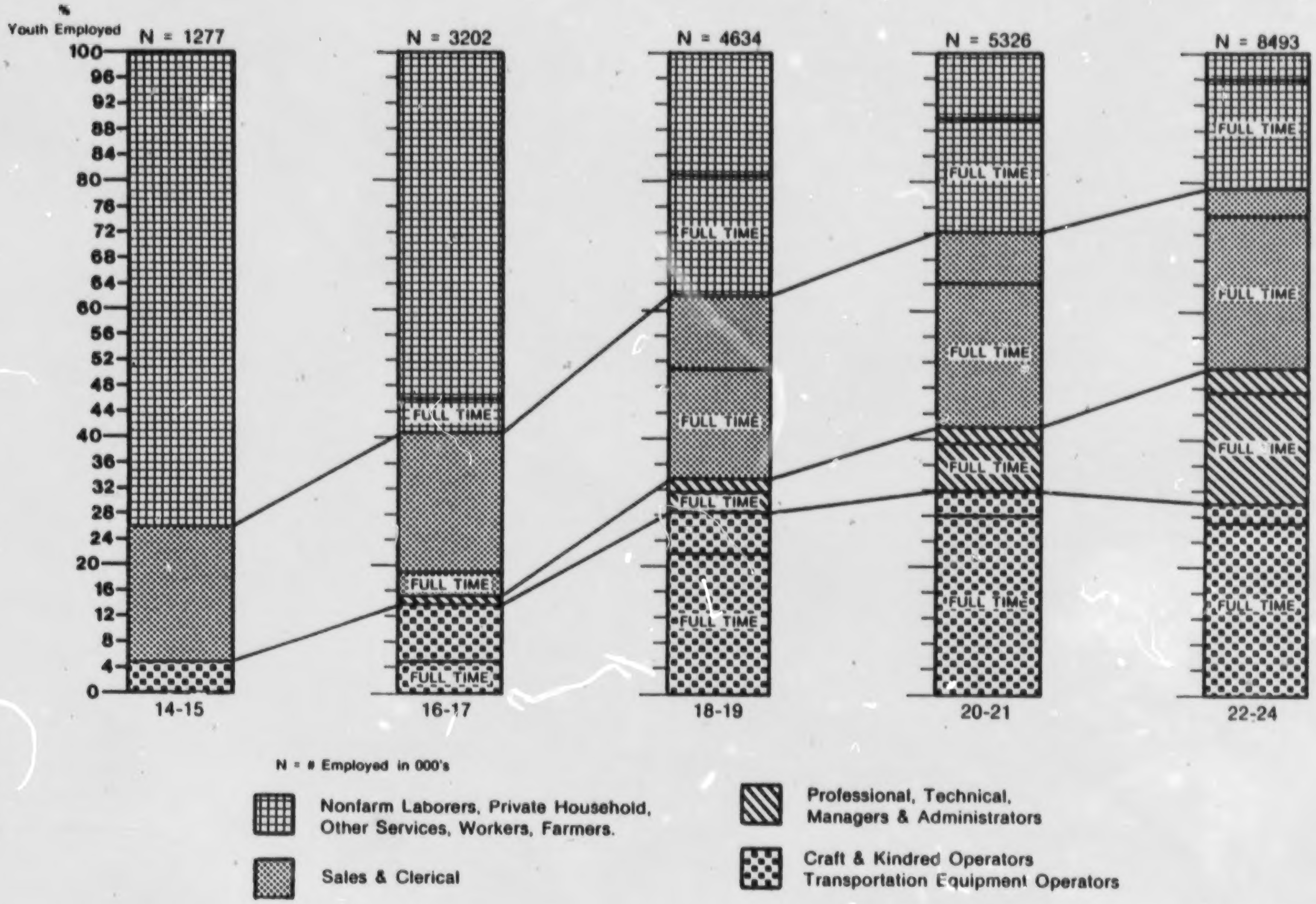
This progression from school to work reflects major changes in the average competencies and attitudes of young people. In the early teens, the labor market is only vaguely understood. Knowledge is based on adult role models and perhaps sporadic odd-job work such as lawn-mowing and babysitting. Career goals are generalized and frequently unrealistic. Little is known about the demands of the workplace. Basic information is acquired by most youth between ages 14 and 16, as independence and income needs increase. Through trial and error in the labor market, increased networks of friends who work, and through exposure in the educational process, most youth develop a knowledge of how to look for and hold a job, and some sense of what they want to be doing in the near-term as well as the long-term.

Moving through a succession of short-duration jobs, most teenagers stabilize their work patterns over time to the point where they have developed and can demonstrate the maturity to stay on a job long enough for formal or informal on-the-job training to occur. Most youth graduate from high school with the basic skills in reading and writing necessary to learn within a job setting. Skill training is usually generalized or multi-occupational in secondary schools, but as youth leave high school many enter jobs where they can be trained and stay long enough to learn a skill or else

CHART 2

EMPLOYED YOUTH (14-24) BY OCCUPATION

October 1978



they seek career training in post-secondary institutions, private agencies, public programs or perhaps the military, with the aim of acquiring the preparation and credentials for entry into the occupation of their choice. In other words, by the early twenties, most youth have narrowed their occupational choices, have matured and are ready to begin career employment, and have acquired a vocational competency either formally or informally.

Paralleling this process of competency acquisition and stabilization is a progression in the way youth are viewed and treated by employers. On the average, employers consider younger teenagers to be unstable and untested. The employment of these youth is "risky" -- their productivity is uncertain, their likely tenure is suspect and their manageability on the job is unknown. A clean resume -- a reasonable school record, some work experience, perhaps some personal contacts -- reduces the risk of hiring and the acceptability of teenage job applicants. But the employers who hire teenagers, especially younger ones, usually do so with the expectation that the relationship will be short-term. There are some work clusters where short-term work is integrated with more stable work at higher wages so that the employer will try out large numbers and then hold onto the more stable ones. Typically, however, employers wait to hire for career entry, i.e. for jobs with training and wage progressions, until youth are in their late teens and are less volatile. When there is an abundant supply of youth relative to demand, as in recent years, employers minimize risk by increasing the age of career entry and increasing the reliance on resumes and credentials demonstrating desired attributes.

The youth development and labor market demand patterns thus intersect. Each subsequent job tends to be somewhat more substantive, more responsible and providing greater exposure to options. Gradually, the young person builds up a resume of experience, credentials and contacts which convinces employers that the individual will produce, will remain on the job, and will be manageable. The employers are more willing to hire and to invest in training on the job. The young adult then moves from the external labor market into the internal labor market or into a career pathway where the cause and effect relationship between experiences or actions and outcomes is more direct.

The predominance of these sequential development and transition patterns among youth, paralleled by employers attitudes and actions, does not imply an orderly, stair-step or cause and effect progression in the acquisition of competencies or in the acceptance by the labor market. Most of what is learned about the labor market in the teens is basic information necessary to hold any job rather than the basis for significantly narrowing career choices. In other words, youth rarely set lasting career goals in their youth which form the basis for a planned sequence of activities. By the same token, the part-time and summer jobs held by teenagers rarely link to the occupations, industries or firms which will provide employment in the twenties. Teen jobs are usually menial and quite temporary. Only as the settling-down process occurs, and as youth mature, do the labor market choices begin to narrow and decisions or experiences become closely related to subsequent outcomes. But here, still, there is great deal of uncertainty and many possible career redirections ahead.

There are also discontinuity points in the progression. Early school leaving, drug or alcohol addiction, arrest and incarceration and early childbirth, particularly out of wedlock, can interrupt the progression temporarily and can also leave negative records which in the future impair progress. There are some positive discontinuities. The high school diploma makes a difference because it is accepted as a credential. Youth with like ability are better off in the labor market if they have the sheepskin. Leaving the nuclear family is also a maturation point for most youth who do not go on to higher education. Marriage is another experience which tends to alter labor force behavior abruptly, leading to greater stability. There is also a discontinuity point in moving from the "secondary" to the "primary" labor market, or from part-time, intermittent work with acknowledged short-term commitments on both the employer and worker sides, to jobs and work patterns with stability, wage progression possibilities and training. The transition point varies for each youth; there is not always a distinct demarcation; but most youth recognize a point of career entry where they look to a job for the future rather than as a stop-gap.

Detours, Delays and Dead-Ends

Most youth follow the same sequence of experiences and competency development, and only a minority are permanently checked by the discontinuities. However, there is wide variation in the pace of movement from one stage to the next, as well as in the successful adjustment within each stage. Individual ability and motivation vary greatly and explain much of the difference. However, the odds are stacked against certain groups whatever their innate ability and motivation. Youth from disadvantaged backgrounds, minorities who have suffered from limited opportunities in the early childhood developmental period, young women who have been socialized into stereotypes which deter them from competing evenly in the labor market, and those youngsters who have mental or physical impairments, start off with a handicap. There is also shortfall in the quality and quantity of opportunities needed at each stage as the basis for competency development. The shortfall affects most seriously the young people who need help most. Rather than receiving compensatory opportunities, those who start off with a handicap frequently face constrained opportunities, have their problems compounded by greater exposure to negative events, and benefit from less peer, parental and institutional support in mitigating the consequences of such events. They are also less likely to benefit from the more positive developmental events.

The cumulative result over the development and transition period is a massive disparity in the preparation for and access to adult careers. There is no single factor which explains the differences, but rather a combination of initial deficits, stunted opportunities, limited support and higher risk of adversity.

For instance, most youth enter the teen years with a developing awareness of the world of work. Their families are work oriented, likely having a male breadwinner as well as a secondary earner. Friends and relatives talk about their jobs and careers. Reading materials, adult interactions and the like are a source of career education. Values are inculcated which will make the youth acceptable in the labor market. In sharp contrast, the youth from a poor family is likely to enter the teens with a limited understanding of career options. He or she has had no experience looking for work because odd-jobs have not been readily available. The network of peers and relatives provides little help in job access and information. There has been limited socialization to the demands of the workplace. The result is that the disadvantaged youth starts off at the labor market threshhold with a deficit which results in a higher rates of failure, delay in successful entry and sometimes lasting alienation and fear.

The labor market exacerbates such difficulties. On the average, youth from poor families or minority youth have been less socialized to the labor market at any age, so that employers seeking nothing more than maturity and dependability for entry jobs will discount each applicant in these groups by the average deficit of the groups. If there is no individual to provide testimonial, and no resume that the individual can use to prove his or her individual competence, youth with potential are constrained from demonstrating and developing this competence.

For most young people age 16 to 18, work means menial, low wage part-time employment during the school year and full-time during the summer. The majority of youth can find jobs if they look hard enough and although they may experience unemployment, it is frictional in nature. Upon graduation from high school, many youth simply bide time in "bridge jobs" until they mature and make career decisions. For those with a diploma, such jobs are relatively easy to find.

Disadvantaged and minority teenagers concentrated in central cities and isolated rural areas, face far less encouraging job prospects. There is a large deficit of part-time and summer jobs, with the result that the employment population rate for nonwhite in-school youth age 16 to 21 is two fifths that of whites. Chart 3. For graduates in the large cities there is also a shortage of bridge jobs as well as greater competition from adult female heads of household and undocumented workers. The job competition is made more difficult by the fact that minority and disadvantaged graduates are more likely to have deficits in their preparation because of inadequate schooling. For out-of-school graduates, the employment/population ratio among 16-24 year-old nonwhites is three-fifths that of white graduates. Dropouts are worst off with an employment/population ratio of less than half that of white graduates.

In all these cases, the average race, sex and income-related differentials in acquired experience lead employers to give preference to other youth at the hiring door. The lack of work experience, and of resumes, credentials and contacts, again hamper disadvantaged youth. They are unable to prove the capacities and characteristics which are assumed for others who are more advantaged. Without work on the resume, the next job application is equally problematic.

Despite these obstacles, the employment rates for most of the minority and disadvantaged in-school youth and graduates increase with age and begin to equal those of more advantaged youths by the early twenties. Most youth successfully transition to the first rungs of career ladders. However, many are left behind. As the employment and unemployment difficulties are reduced, disparity emerges between the occupations and industries of employment by race, sex and family background. A larger proportion of minority and disadvantaged young adults remain in "secondary labor market" jobs characterized by high turnover, low wages and limited training opportunities. Although there is a convergance in employment rates, it is somewhat deceiving in that for some the jobs will lead upward while for others they will lead nowhere. Some young adults who are career ready simply have trouble making a career connection. Others are unable to transition because previous experiences have not been adequate to prepare them for the primary labor market. They may have to spend a few more years in bridge jobs, although they are not necessarily trapped. Career opportunities are artificially constrained for disadvantaged and minority young adults even if they have reasonable preparation. Discrimination is a major factor. Another is the tendency of employers to ascribe to all youth in a cohort, for instance black males, the average characteristics of the cohort, such as the average educational achievement differential. Young adults who could make it are simply not given the chance at adult career ladders. This is especially true when there is an excess supply at the career entry point so that employers have no incentive to take any risks in trying out those who might or might not make it.

A smaller group clearly lacks the competencies required for career entry. If they do not receive help, their future chances will be limited. Those left behind may turn to the military or CETA programs, but these do not provide enough opportunities.

A Sequential and Probabilistic Interpretation

These generalizations about career development pathways and problems obscure the dynamism and diversity of the transition experience for youth. There are many minority youth from low-income families who enter the teens with adequate labor market awareness, who find a progression of jobs during the school year and summer while in high school, who graduate and find their way down stable and attractive career pathways. There are others who experience failure at every turn, sometimes through no fault of their own. Some youth may make it in the adult labor market without any of the conventional preparatory experiences. Others may do well all along the process but then fail to make the career connection. There is almost unlimited variation within the broad parameters of the development and transition process, and this can only be captured from a perspective which views youth experiences sequentially and probabilistically:

o There are not clear paths of success and paths of failure, or building blocks which guarantee progress or obstacles which are insurmountable. Rather, there is a cumulative series of experiences which have a statistical pattern of interrelationship in the short-term as well as the long-term. More extensive and attractive opportunities will, on the average, lead to more positive outcomes, but the connection is not deterministic. Adjusting for individual differences, longitudinal evidence suggests that there is a correlation between labor market awareness in the teen years and subsequent employment and earnings. Employment in summer jobs is related to school-year work and vice-versa. Work experience during the teen years is related to earnings during the early twenties. School completion or noncompletion is related to unemployment and the occupational distribution in the twenties which, in turn, is related to long-run earnings. There are correlations between teenage unemployment and juvenile delinquency, as well as between criminal activity and subsequent unemployment problems. Likewise, there is a two-way relationship between employment problems and drug use, illegitimacy, and other social pathologies.

While these statistically significant relationships are predictive they are not prescriptive in the sense that cause and effects are clear enough to reliably orient personal or programmatic decisions. The measurable impact of any short experiences--and most development and transition experiences of youth are by nature, of short duration--are rarely determinative of future outcomes.

o Opportunity deficits reduce the success chances of all youth who depend on these opportunities, even though there will be enormous variance in success rates. Conversely, increased opportunity has its impacts not just on the individuals who benefit directly, but indirectly on all of those affected by the deficit. For instance, if jobs are created, the youth who fill them benefit while in the job, but they had some probability of being employed otherwise. The work they would have found instead goes to others. Although the individuals who secure the new jobs may stay only a short time, the chances of all similar youth finding work are improved. The direct benefits on the youth who hold the jobs for a short time are supplemented by these indirect effects. Youth opportunities are rarely direct routes for specific individuals, but rather additional options which improve chances of a larger number.

o Negative or positive probabilities of success or failure are multiplicative rather than additive. Attempts to explain racial differentials in terms of race plus other variables correlated with outcomes always leaves a large unexplained variance. This residual is sometimes ascribed to discrimination. Another way to say it is that the whole is more than the sum of the parts. For the advantaged youth, each dimension is supportive of the other, so that a setback on one front may be compensated for on another. For the disadvantaged youth, the dimensions more likely are negative, intensifying the problems which are encountered.

o Negative probabilities are also multiplicative for individuals over time. If negative experiences recur over a period of years, they tend to become reinforcing. The individual with three or more periods of unemployment or an extended period of unemployment has far more serious problems than one with a short exposure. Progress for some youth is simply "compound interest" from the advantages provided prior to entry into the labor market. The converse holds for disadvantaged youth. For instance, recidivism rates increase with the number of previous arrests. Incarceration usually occurs and this puts the youth in a milieu which may be condusive to further crime.

o The cause and effect relationships between present labor market experiences and future labor market outcomes become stronger as an individual ages. Young people are much more likely to remain in the occupations and industries where they work at age 21 than at age 16. They are more likely to be in career tracks where success is cumulative. On the other hand, derailment from such a track is far more serious than losing a job at age 15 or 16. It means essentially that the young adult must begin again. Likewise, almost all teenagers work in low paying, high turnover menial jobs with no training, but this does not constrain their prospects. A twenty-year-old in the same status has more severe consequences. The same holds for negative experiences.

o As the cause and effect relationships between experiences and future outcomes become stronger with the passage of time, labor market status variables become more predictive. Put another way, unemployment for a young teenager is less an indicator of future problems than unemployment for a twenty-year-old. A sorting occurs over time as the individuals who will make it in the labor market are separated from those who will not, so that point-in-time status increasingly reflects this sorting. In other words, not only are the identifiable problems more serious, but real problems are more identifiable.

o As patterns become more rigid and channelled with age, they become more difficult to reroute. It is a conventional wisdom that the earlier an intervention in the life of a youth, the more impact it can have, since the process of development and transition is sequential. The young teenager has little knowledge about the labor market so that a helping hand may be very important in setting him or her off in the right direction. By the late teens, failure in the labor market may have already instilled attitudes and behaviour which reinforce the negatives.

This sequential and probabilistic interpretation of the development and transition process has implications for efforts to equalize opportunities and to assist those who have fallen behind at different stages. Most of these implications are correlatives of the points addressed above:

o There are innate tradeoffs between earlier and later interventions. Earlier labor market interventions have the greatest probability of impact on youth who need this assistance, and they tend to be less costly because the problems which they address are less entrenched than they will be by the late teens. On the other hand, it is difficult to identify those who really need help among the younger group, and resources therefore tend to be utilized for many who would make it on their own. Later interventions can be more targeted and can have a more direct impact on future outcomes.

o When addressing one-dimensional problems, the interventions can be fairly direct. However, when there is a Gordian knot of overlapping negative probabilities, there is no clean way to cut through or to carefully unravel each thread. It is necessary to address all dimensions or else improvement on one front will be undercut by problems on other fronts. This applies sequentially as well as statically. If early opportunities are improved for youth with severe problems, but then they are left to fend for themselves, it is likely that early progress will retrograde.

o Reductions in opportunity deficits are not the only answer for the problems of youth with more serious handicaps to employment. The cumulative impact can also be improved by better sequencing of activities so that there is less slippage and misdirection. It can be improved by interventions which increase the positive cause and effect relationships so that success in one experience will have the same impact on the subsequent probability for the disadvantaged as for the advantaged youth. Finally, supportive mechanisms which offset negative experiences, particularly the potential discontinuity events, can help youth to better realize opportunities.

o The effects of short-term developmental or preparatory experiences at an early age are more difficult to assess than those more intensive and narrowly directed experiences at a later age. For instance, a counseling and occupational information experience in schools is brief and low cost. It must be broadly offered because it is difficult to determine exactly who needs it and who does not. The short-term impacts on any youth, and certainly the aggregate cumulative impact, cannot be measured easily. Likewise, the effect of a nine-week summer job is likely to be modest; the impacts of a five or ten percent reduction in the summer job deficit will be spread among all those eligible and affected, making the aggregate impact difficult to determine. A work experience for out-of-school youth will more likely be full-time, hence having a greater impact on the present and future. The youth in such jobs will be different than those who are still in school, and more clearly in need. Finally, at the career threshhold, interventions can be targeted and their direct effects more clearly measured.

o If opportunities are expanded earlier in the hierarchy, there will presumably be less of a deficit later. Even if it is hard to measure, there is evidence of causality. More or longer periods of work experience will increase probabilities of future employment and will marginally reduce the universe of need for remediation or career entry assistance later. Likewise, improvements in the quality of experience at each level will presumably increase their impacts and further reduce deficits although this effect is largely hypothetical. Viewed in this way, there is not a single universe of need but a vector of needs among youth of different ages and in different circumstances, and the elements in the vector are interrelated.

The Universe of Need

Measuring the dimensions of this vector of needs depends critically on the assumptions. It is possible to reasonably define youth employment problems in different ways that produce variances of several millions in the needs categories. Needs definition is a critical exercise because the resulting measures are the fundamental ingredient for funding level and allocation decisions.

Based upon the preceding analysis of the youth transition and development process, needs are defined in four categories: Pre-employment preparation needs relate to the deficits in "coping skills," in world-of-work awareness and in the ability to find and hold a job which result from a dearth of developmental opportunities. Preparatory work experiences needs address the deficits in part-time in-school, seasonal and "bridge" jobs which help prepare youth for later career entry.

Remediation needs are a count of young adults at the normal career entry point who lack the basic vocational and educational skills to begin an adult career. Finally, career employment needs address the problems of young adults who have minimally adequate preparation but are unable to make the career connection.

The pre-employment preparation deficit is most difficult to define because of the lack of good indicactors of coping skills and world-of-work awareness, as well as data limitations. Needs are estimated from the National Longitudinal Survey by counting youth with below average knowledge of the world-of-work and lack of a significant work experience. World-of-work knowledge is measured by a set of questions given to the sample of youth. Scores on these questions have been found to have significant correlation with future earnings. Three estimates of need are derived. The high estimate includes all youth with below average scores who have not worked for 2 weeks or more. The intermediate estimate includes only those with below average scores who are from low-income families and who have not worked 13 weeks or more in the last year for 35 hours a week. Since 13 weeks of employment corresponds to a full-time summer job, perhaps with employment over the Christmas vacation, this is probably a reasonable standard of successful labor market entry. The lowest estimate counts only those from low-income families with below average scores who have never worked for 2 weeks or more.

The prepartory work experience gap is calculated from the Current Population Survey by adjusting the employment/population ratios of lower income youth at each age to those of advantaged youth. Separate calculations are made for the school year and summer for students and year-round for out-of-school youth. The estimates are made with three low-income levels: The BLS lower living standard; 85 percent of this standard and 70 percent.

The need for intensive remediation is estimated from the Current Population Survey by counting those persons age 21 who are unemployed, out of school, lack a high school diploma and are from families or households with low income, plus those who are out of school and have a high school diploma but have been unemployed 15 weeks or more in the preceding year and are from families with low income defined, again, by the three separate standards. It is estimated that half of those in need of remediation are ready for intense effort at age 18 and 19 and half at age 20 and 21.

The deficit for career entry employment is calculated from the Current Population Survey by counting persons who at age 21 are out of school, who have a diploma, who were in the labor force more than 40 weeks in the previous year, who earned less than $6,000, and were in families or households with low income. It is assumed that one-third of these could be placed in career entry employment at age 18-19 and the remainder at ages 20 and 21.

The ultimate universe depends on the family and household limits in each of these needs categories. The most inclusive universe of need is generated when the high estimate of the pre-employment preparation deficit is counted along with the work experience deficit for youth from families with incomes below the BLS Lower Living Standard, and with the intense remediation and career entry employment deficits calculated for young persons from families with incomes below 85 percent of the BLS Lower Living Standard. This gradient in the income cutoffs is based on the notion that more expensive interventions later in the development and transition process need to be and can be more targeted. Table 1.

A second set of options uses the intermediate estimate of the pre-employment preparation The work experience deficit includes only those below 85 percent of the lower living standard and the intensive remediation and career entry employment counts use 70 percent of the standard as the income cutoff. Table 2,

Finally, the most targeted universe restricts the pre-employment prepration to the low estimate and work experience as well as intensive remediation and career entry employment count to youth from families or households with incomes less than 70 percent of the BLS Lower Living Standard.

Clearly, the numbers are critically dependent on the assumptions. The assumptions in the intermediate needs estimates are probably the most acceptable. While these provide a sense of the relative dimensions of the problems, there are several points which must be considered in their interpretation.

TABLE 1

UNIVERSE OF NEED

MINIMUM ESTIMATE

	Pre-Employment Preparation	Preparatory Work Experience			Career Entry Training & Remediation	Career Entry Employment
		In School	Summer	Out-of-School		
14-15	396	78	44	4		
16-17	227	358	450	6		
18-19	109	201	417	91	32	16
20-21	42	155	317	162	32	32

TABLE 2

UNIVERSE OF NEED

INTERMEDIATE ESTIMATE

	Pre-Employment Preparation	Preparatory Work Experience			Career Entry Training & Remediation	Career Entry Employment
		In School	Summer	Out-of-School		
14-15	1029	91	17	7	-	-
16-17	780	373	495	10	-	-
18-19	473	212	472	127	32	16
20-21	267	153	375	215	32	32

TABLE 3

UNIVERSE OF NEED

MAXIMUM ESTIMATE

	Pre-Employment Preparation	Preparatory Work Experience In School	Summer	Out-of-School	Career Entry Training & Remediation	Career Entry Employment
14-15	2,270	116	0	7		
16-17	1,044	408	536	12		
18-19	311	250	468	142	41	54
20-21	111	85	375	283	41	110

First, the deficits are calculated as gaps remaining after present government programs are included.

Second, reduction in the pre-employment and work experience deficits would reduce those for remediation and career entry; in other words, total need is not the sum of the separate totals.

Third, it is assumed that the group with remedial needs would attain career entry if its deficits were met. In other words, remedial assistance would presumably include career entry employment assistance if this were required.

Fourth, if these deficits were filled, it would not mean the end of measured youth labor market problems. Early pre-eemployment assistance would equalize chances but there would be only modest direct effects on teenage unemployment. Elimination of the preparatory work experience deficit would bring the unemployment rate of all youth to that currently for advantaged youth, which is still far above the rate for adults. The remediation and career entry efforts would catch those who did not otherwise make it into the first rungs of career ladders, but only those with the most severe problems would be helped. For instance, the non-income targeted universe for career entry assistance and remediation is nearly eight times as large as the targeted universe. However, if all the deficits as defined were met, the youth career development and transition process would certainly be smoother for those burdened by the lack of opportunity. There would be much closer to an equal chance for career access.

Priority Among Needs

The seriousness of elements in this vector of needs, and the priorities for intervention, are not indicated by number counts alone. It is also necessary to consider the immediate and long-run consequences of unfilled needs, as well as the resources involved in meeting them. In the final analysis, prioritization must also depend on theoretical and normative judgements.

1. Long-Term Implications

The long-term impacts of experiences along the path of development and transition are difficult to measure and probably understated by most available assessment techniques. There are so many factors affecting youth during these critical years, and these factors are so interrelated over time, that statistical sorting techniques can provide only a sense of the direction of causality and a crude approximation of the degree. Descriptors of youth are limited so that it is difficult to control for the differences. Such controls are a necessary precondition for sorting. For instance, to measure the long-run impact of high school part-time employment, the future employment and earnings of a group of youth who work more must be compared to those of a group who work less, all else being equal. But all else is seldom equal. Regression analysis may control for age, socioeconomic status, race and other variables, but motivation might be involved in the choice to work, or perhaps disenchantment with schooling, and this would certainly be reflected in future outcomes although not controlled by the demographics. Statistical techniques also have problems in dealing with cumulative and longitudinal phenomenon. The simple fact is that the explanative power of any youth status or change on future status or change is limited by the inadequacies of measurement and statistical techniques.

There is, nevertheless, an increasing body of evidence documenting the long-term importance of positive youth career development and transition experiences:

To assess the impacts of work and nonwork on future employability and income for teenage males, Meyer and Wise studied the 1972 National Longitudinal Survey of high school seniors. They concluded that an additional 10 hours of work per week during the senior year produced an 11 percent increase in weeks worked following graduation and a 3 percent increase in weekly earnings. However, after controlling for individual differences, there was no evidence of a lasting effect 5 years subsequently.

A study by Ellwood used the data from another National Longitudinal Survey to determine impacts of work on the future employment and earnings of out-of-school males. The study found that an extra 10 weeks of employment one year was related to between two and three more weeks of employment the next. Ten weeks out of work in the first year after school reduced wages 5 percent 8 years subsequently.

The National Longitudinal Survey data were used by Corcoran to assess impact of youth employment for females. The study found that, controlling for all variables, the odds a woman would work in a given year were eight times higher if she had worked the previous year than if she had not. Ten years after completing school, a woman who spent 2 years out of the labor force immediately after school earned between 3 and 5 percent less per hour than women who worked continuously.

A study of differentials for blacks and whites by Osterman found that whites who had no unemployment in 1968 had 26 percent less than average unemployment in 1966 and 22 percent less in 1970. For blacks, those with zero unemployment in 1968 had 12 percent less in 1966 and 34 percent less in 1970. Becker and Hills found that for the "average" unemployed youth, short joblessness did not have negative consequences. For black teenagers with 15 weeks or more unemployment, however, the future impacts were significant.

A study by Herrnstodt, Horowitz and Sum on the post-school experiment of students in 9 cities found that all else being equal, each additional 10 weeks of employment during high school increased the amount of employment in the post high school years (17-21 months) by 2 percent. Each additional week of employment in the high school increased the hourly wage by 2-3 cents. Youth who were labor force participants in the high school period had an 8 percentage point higher participation rate in the post high school period.

Studies have also looked at the long-range impacts of occupational information and training. Parnes and Kohen studied 18-26 year old employed men not enrolled in shcool. Controlling for years of school completed and mental ability, an increase in occupational knowledge equivalent to a five point rise in occupational test score (out of a possible 56) was related to an annual earnings increment of about $140 for a steadily employed white youth and $290 for a black. A study by Stevenson corroborated these findings.

Meyer and Wise studied the effects of high school vocational or industrial training on employment and wage rates after graduation. They found that no measure of high school vocational or industrial training was significantly related to subsequent employment or wage rates. However, on-the-job training subsequent to school leaving was related to higher future wages.

A study by Stevenson found that training if applied on a job, had a high payoff, ranging from $1500 higher annual earnings for white males to $2300 per year for black females. The effects were lasting.

Grasso studied the relative merits of various high school curricula on earnings. He found that while youth in high school vocational training programs did not receive higher starting rates of pay, white youth benefitted from post-school training although blacks did not.

Again, these studies are far from definitive concerning the magnitudes of long-term impacts. Different assumptions and analytical techniques will produce different findings. However, as a generalization, the evidence seems to be mounting that youth labor market experiences are cumulative, that short-term problems have long-term consequences, and that the causality is probabilistic rather than deterministic in the sense that work or training increases future chances modestly but is certainly no guarantee of success.

2. Immediate Consequences

Even if there were no long-term implications of youth employment problems, the immediate consequences would argue for strong action. Reams of statistics and volumes of analysis have described these problems, but perhaps the most telling demensions are the following:

o Youth unemployment accounts for a major share of aggregate unemployment and is a problem of increasing absolute dimensions. Any effort to reduce overall unemployment must address the problems of youth; and greater emphasis is warranted to the extent these problems have become more severe.

	14-19 as Proportion Annual Unemployed	14-21 As Proportion Annual Unemployed	Number Average 14-19 Unemployed (thousands)	Number Average 14-21 Annual Unemployed (thousands)
1964	25%	34%	963	1305
1969	33%	43%	981	1256
1974	31%	42%	1637	2205
1978	29%	40%	1830	2494

o Youth unemployment problems are critical because they are so inequitably distributed. In most social welfare areas, there has been progress towards greater equality. Youth employment is a glaring exception. Secular trends have widened race and class disparities. The job gap between white and nonwhite youth, and between the rich and poor, has widened considerably.

Employment/Population Ratio Nonwhites
Employment/Population Ratio Whites

	Males		Females	
	16-19	20-24	16-19	20-24
1959	85%	98%	58%	101%
1964	84	99	68	97
1969	76	98	64	97
1974	59	87	50	81
1977	50	78	44	74

Employment/Population Ratio Disadvantaged Males 14-21
Employment/Population Ratio Advantaged Males 14-21

67	.86
72	.78
77	.66

o The hardship related to youth joblsesness is significant and increasing. There are those who argue that youth are rarely breadwinners so their needs are not serious. Yet considering families and households as units, and the spending needs of youth as one component of family or household needs, then the earnings deficits of youth are the same as income deficits of the units. Part-time school year and full-time summer employment of a poor youth can provide two-fifths of a poverty level income for a nonfarm family of four. If the employment/population ratio of all 14-21 year olds in poverty were raised to the levels of nondisadvantaged youth, the extra family and household earnings would close the income deficit of all poor families and households by one eighth.

Youth account for a substantial and increasing share of labor market related hardship as measured by the National Commission on Employment and Unemployment Statistics. In 1967, there were 429 thousand youth age 16-19 and 811 thousand age 20-24 who were in the labor force 27 weeks or more predominately full-time or involuntarily part-time, who had annual earnings below the family poverty level due to intermittent or no employment, and who resided in families or households with incomes below 150 percent of the poverty threshold. By 1976, the numbers had risen to 581 thousand and 1,160 thousand respectively. The youth share of persons whose employment and earnings problems were related to family and household income problems i.e., those counted by the NCEUS hardship measure, rose from 20.6 percent in 1967 to 27.8 percent in 1976.

o Joblessness among youth has substantial social costs and consequences. The most immediate and frequently ignored dimension is foregone productively. Even if it is assumed that jobless youth on the average can produce only 90 percent of the minimum wage because of lack of preparation or experience, the net cost of employment to society is only the 10 percent differential between useful output and job creation outlays. Whether this margin is 0, 10 percent or more is subject to debate. Work valuation assessments of public programs have reached the rather surprising conclusion that economically disadvantaged youth participants produce output valued (by alternate supply price estimates) at close to their wages and salaries. Whatever the appropriate discount, the personal consequences of employment must be weighed against this margin rather than the total pricetag of filling the job gap, and the cost to society of youth joblessness must be assessed in terms of the goods and services they could produce.

Joblessness among youth is also associated with many outcomes which carry heavy costs to society. Particularly significant are the relations between youth unemployment and homicide mortality, automobile accidents, and criminal aggression. There are also correlations with birth out of wedlock and narcotic arrests. Even slight improvements of employment can have major effects. For instance, the carefully studied supported work demonstration documented a one-sixth drop of arrests for youth during their participation. The criminal justice costs for a larcency or felony assault have been estimated at around $2700, so that even this small decline in crimes offset between 3 and 5 percent of wage and salary costs to youth under supported work.

o The youth employment problem is most amenable to actions which will reduce unemployment with a minimum of inflationary pressures. For young teenagers at the portals of work, joblessness is largely frictional. Clearly, the lack of labor market and job knowledge are major factors for youth, whereas, adult frictional unemployment is unquestionably closer to its theoretical minimum and cannot be as readily eased by improved information. Measured teenage unemployment can be reduced at a low cost by targeted actions because of the limited hours of work and wages of most jobless youth. There is little inflationary pressure from such actions because of the excess supply of youth and the fact that they are competing for the lowest jobs so that bottlenecks are not being created. Intensive remedial education and training that leads to career entry has social benefits which exceed costs for young adults who can apply skills over a full career. Finally, career access assistance makes sense because disadvantaged youth are stereotyped by employers; if the government bears the risk, employers can do the sorting they would not otherwise undertake and the youth who are hired at their potential rather than below it will pay back society more than the cost of the risk reduction in increased output. In other words, youth employment and employability development efforts are probably the best investment of scarce resources if the aim is to reduce unemployment without exacerbating inflationary pressures.

3. Costs of Meeting Needs

The budget costs of reducing these opportunity deficits depend on assumptions about hours of work or training required to fill the gaps, the wage levels and allowances paid, the intensity and mix of services and the administrative expenses. Based on current experience and a range of assumptions about the types of activities which would be initiated, the unit costs are estimated for interventions of different types at different points in the development and transition process. Table 4.

The translation of the number counts of youth with current needs and their unit costs of meeting these needs into the aggregate pricetag to provide full career opportunities rests on assumptions concerning the impacts of early interventions in reducing later needs. Estimation of the aggregate pricetag is a highly speculative exercise, cumulating impact assumptions on top of cost assumptions and universe of need assumptions. A best guess is that an aggregate expenditure of $7 billion would be required to redress the vector of youth employment problems as defined by the intermediate needs assumptions, with $6.3 billion in work-experience and pre-employment assistance to bring youth up to the career threshold and $700 million for intensive remediation or career entry employment to get them over the threshold and into adult careers. The estimated costs by opportunity category and age groups are presented in Table 5. These more detailed projections are even more speculative than the aggregate estimates, but at least yield a sense of relative magnitudes.

TABLE 4.

UNIT COSTS OF PROVIDING YOUTH CAREER OPPORTUNITIES

		Preparatory Work Experience				
	Pre-Employment Assistance	In-School	Summer	Out-of-School	Career Training and Remediation	Career Entry Employment
14-15	$175	$650	$730	$4350	-	-
16-17	1000	124[illegible]	980	6300	$5250	-
18-19	2150	2500	1365	8000	5250	$ 9000
20-21	2150	2700	1470	10000	5250	9000

TABLE 4.
ASSUMPTIONS

AGE	PRE-EMPLOYMENT ASSISTANCE	WORK EXPERIENCE			CAREER TRAINING AND REMEDIATION	CAREER ACCESS
		IN-SCHOOL	SUMMER	OUT-OF-SCHOOL		
14-15	Testing - $55 Counseling - $95 Labor Mkt. Info. - 25	Weeks - 32 Wkly. hrs. - 5 paid/5 unpaid Wage - $2.90 Support Cost Factor - 1.4	Weeks - 9 Wkly hrs. - 20 paid/5 unpaid Wage - $2.90 Support Cost Factor - 1.4	Weeks - 50 Wkly. hrs. - 20 paid/8 unpaid Wage - $2.90 Support Cost Factor - 1.5		
16-17	Counseling - $100 Basic Skills - $450 Stipend - $250 Job Search Assistance - $200	Weeks - 32 Wkly. hrs. - 10 paid/2 unpaid Wage - $3.10 Support Cost Factor - 1.25	Weeks - 9 Wkly. hrs. - 28 paid/2 unpaid Wage - $3.10 Support Cost Factor - 1.25	Weeks - 50 Wkly. hrs. - 30 paid/5 unpaid Wage $3.10 Support Cost Factor - 1.4	Job Corps .6 yrs. $6500 Nonresidential Trng. - $4000 - 1000 hrs. 50 percent Residential 50 percent nonresidential	PSE 1 year - $11,500 OJT 6 months subsidized-$6500 50 percent PSE 50 percent OJT
18-19	Intensive Counseling - $250 Basic Skills - $600 Job Search Assistance & Follow-up - $500 Stipend - $750	Weeks - 32 Wkly. hrs. - 20 Wage - $3.25 Support Cost Factor - 1.20	Weeks - 10 Wkly. hrs. - 35 Wage - $3.25 Support Cost Factor - 1.20	Weeks - 50 Wkly. hrs. - 37.5 Wage - $3.25 Support Cost Factor - 1.30	Same As Above	Same As Above
20-21	Same As Above	Weeks - 32 Wkly. hrs. - 20 Wage - $3.50 Support Cost Factor - 1.20	Weeks - 10 Wkly. hrs. - 35 Wage - $3.50 Support Cost Factor - 1.20	Weeks - 50 Wkly. hrs. - 40 Wage - $3.50 Support Cost Factor - 1.30	Same As Above	Same As Above

TABLE 5
ESTIMATED AGGREGATE COSTS OF PROVIDING FULL CAREER OPPORTUNITIES

MINIMUM NEEDS ESTIMATE

	Pre-Employment Assistance	Preparatory Work Experience: In-School	Preparatory Work Experience: Summer	Preparatory Work Experience: Out-of-School	Career Entry Training and Remediation	Career Entry Employment	TOTAL
14-15	80	48	29	17			174
16-17	170	422	419	38			1049
18-19	118	453	513	312	152	126	1674
20-21	45	378	420	880	152	261	2136
14-21	413	1301	1381	1247	304	387	5033
INTERMEDIATE NEEDS ESTIMATE							
14-15	180	56	12	30			278
16-17	585	439	461	63			1548
18-19	510	478	581	576	152	126	2423
20-21	288	373	497	1360	152	261	2931
14+21	1563	1346	1551	2020	304	387	7180
MAXIMUM NEEDS ESTIMATE							
14-15	397	72	-	30			499
16-17	783	481	499	69			1832
18-19	335	565	576	304	205	459	2444
20-21	120	208	497	1160	205	945	3135
14-21	1635	1326	1572	1563	410	1404	7910

Assumptions:

1. Pre-employment assistance provided to all 14-15 year olds will reduce by 25 percent the needs for more intensive pre-employment assistance among 16 and 17 year olds; meeting the needs at this age will, in turn, reduce by 50 percent the requirements for aid to older youth.
2. Increased chances of work among 14 to 17 year olds will reduce by 5 percent the need deficit at age 18 and above for youth work experience.
3. Career Entry Training and Remediation will be offered once to those in need. It is assumed that ½ of the universe will receive help at age 18-19 and ½ at age 20-21, on the presumption that some will be slower to mature than others.
4. Career Entry Employment will be offered once to those in need. It is assumed that 1/3 of youth in need will receive help at age 18-19 and 2/3 at age 20-21.
5. Expanded pre-employment assistance will help youth find jobs on their own and stay longer in jobs. Meeting the pre-employment deficit will reduce the work experience deficit by 5 percent at each age, and will reduce the Career Entry Employment and Remediation needs by 5 percent.
6. Improvement in teenage employment chances will reduce the need for career entry employment and remediation by 5 percent.
7. Career Entry Training and Remediation opportunities and Career Entry Employment options subtract from out-of-school employment opportunity deficits among the 18-21 year olds who are assumed to be adequately mature for career investments and entry.

4. The Normative Framework. The preceding evidence suggests some of the tradeoffs and considerations in prioritizing among these needs and in allocating scarce resources among alternative interventions: Early needs are more widespread, have more limited and/or less measurable immediate and future implications, and can be met at a lesser cost while those encountered further along in the development and transition process have greater immediate and future implications but can only be met at a higher cost.

There are two somewhat distinct frameworks which might be used to prioritize needs: The first would have as its primary goal the equalization of chances for successful adult career entry. This perspective, which might be labelled the "developmental outcome framework," would weigh needs at the early stages in the development and transition process in light of their impact at the end of the process. Problems of youth would be addressed with first consideration to alleviating problems in adulthood. A second framework would have as its primary goal a reduction in the measured youth problems simply because they are real and serious in their own right. This perspective, which might be labelled the "direct impact framework," would consider any future benefits as another argument for addressing present problems.

Both the "direct impact" and the "developmental outcome" frameworks share the recognition that reducing the job gap for teenagers is an immediate an important goal. All the evidence points to the fact that the opportunity shortfall at all levels is an important issue that must be addressed. In other words, the most straightforward way to address the youth employment issue is not to prioritize among needs, but to meet them all. This is not a heroic goal. As defined in this analysis, the vector of youth employment needs can be met. The shortfalls in pre-employment opportunities, youth jobs, and career entry employment and intensive remediation could be filled for an estimated $7 billion. This is certainly within the realm of possibility over the next decade, particularly if the reduced size of the youth cohort helps to alleviate the deficits.

Indeed, given the cumulative and probabilistic nature of the problem, it would appear to make sense to move towards a full opportunity approach. If all youth have equal chances at some levels but not others, then there are likely to be continuing disparities larger than the differences in experience would warrant. A pervasive phenomenon in the youth development and transition process is that the gatekeepers at each opportunity point tend to discount an undifferential cohort by the average characteristics of the group, restricting opportunity for those who are capable and motivated within the cohort. This magnifies differentials over time. If all opportunity deficits were filled, and differentiation was handled more effectively than in the current opportunity structure, there would be not excuse nor rationale for such discounting. There is reason to hope that the end result of full equalization of opportunity would be greater than the sum of the marginal impacts of opportunity increments.

Whether this is the case, the documented immediate and long-term benefits of equalizing youth employment opportunities--the social output from youth work, the reduced negative outcomes resulting from widespread joblessness, the benefits of a more equitable society and of an improved unemployment/inflation tradeoff, and the cumulative impacts on career development--justify dramatic action.

THE YOUTH UNEMPLOYMENT PROBLEM:
FACTS AND FIGURES

David Robison

This country must enlarge and improve present youth jobs programs if unemployed and typically dropout youths are to be taken off the streets, or lured away from crime, and put to work. With the hardest-to-employ youths age 14 to 19, the two main alternatives are work or crime. Our cities are experiencing directly the broad economic and social effects of the expansion of youth crime, including:

the flight of businesses from deteriorating neighborhoods;

the geographic expansion of crime into middle-class and typically white neighborhoods, as teenagers roam further afield;

the deterioration of evening business, social and entertainment activities;

the restriction of older people to their homes for larger parts of the day;

the decline in morale within city schools;

the conversion of youth gangs into small units whose predominant purpose is to gain income from crime.

Most inner-city, unemployed youths age 14-21 are high-school dropouts. The aftermath of dropping out is a crucial period in their lives: their market value is lowest; peer pressures are most intense; and the need to find some way other than education into adult society means that these youths either gain a job or they will usually stay on the streets and find their way into crime. Jobs are the key alternative to youth crime.

There is ample youth joblessness to account for high American crime rates in general and for soaring ghetto crime rates especially. The United States has throughout the last 20 years been failing to connect its youth with the job market. Despite the economic advances and civil rights gains of the 1960s, and despite the Great Society and War-On-Poverty efforts, and the range of current CETA programs, the United States has shown a steadily declining record of providing jobs for inner-city youths, year after year.

Inner-City Unemployment

It is estimated that nearly two million teenagers are unemployed in America, constituting nearly one-fifth of the labor force between the ages of 15 and 19. The unemployment rate in the ghettos, however, is not 20%, but an official unemployment rate of 40%. The Urban League suggests that the real number is 60%. In the Bronx, only 150,000 jobs exist for a total work force of about 600,000 youths and adults.

The Vocational Foundation states that "for minority youth, these are the years of a great depression, far worse in its impact on youth than any depression which the country as a whole has ever encountered."[1]

According to VFI, the most disturbing aspect of inner-city joblessness is that it has emerged as a separate phenomenon, with a life of its own, relatively unaffected by general black economic progress, or by the job market for other young people. As recently as the mid-1950s, black and white teenagers had roughly equal unemployment rates. Blacks often had higher rates of labor force participation than whites did.

Today, after 20 years of black economic progress, unemployment among black teenagers is almost 2 1/2 times the white unemployment rate. The labor force participation rate of young blacks is now only 75% of the white rate. Since the early 1950s, black teenage unemployment has risen about three times faster annually than white unemployment. Moreover according to VFI:

> "Youth crime, one-parent families, and youth joblessness have all risen by a factor of five since the mid-1950s. These rather parallel changes suggest the interrelatedness of the three factors--youth crime, one-parent families, and youth unemployment."

Failure to Help Inner-City Minority Youth

It is extremely difficult--yet essential--to try to understand why current approaches to employment and training have failed to alleviate the problem of inner-city unemployment.

Why, VFI asks, have inner-city youth become the chief sufferers from unemployment during the same period that many programs have focused on the needs and problems of these youths? Why has black youth unemployment soared while federal aid to blacks for special education and training has multiplied by a factor of twenty?

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[1] Our Turn to Listen, written by George Gilder, and published in 1978 by Vocational Foundation, Inc., 44 East 23rd Street, New York, N.Y. 10010, telephone (212) 777-0700.

"Why have job opportunities for minority black youths declined so sharply during a decade when affirmative action has become part of every govenment contract, during the same time that black youths have virtually closed the historic gap between the races in the number of years of completed schooling; and during the time that black participation in federal training and employment programs has been ranging from 20% to 60%?"

Cities with the Worst Problems

Youth unemployment seems to be increasingly concentrated in the economically depressed areas of a considerable number of cities.

While the national youth unemployment average was 19% in 1976, according to the Bureau of Labor Statistics, the respective rates of youth unemployment in 1976 for the following cities were:

Detroit	36.1%
Baltimore	35.8%
Washington	32.9%
New York	30.3%
Cleveland	27.6%
Philadelphia	27.1%
St. Louis	24.4%
Milwaukee	24.1%
Chicago	24.0%

By comparison, Dallas had 20.1% and Houston 16.8%, both around the U.S. average of 19%.

According to Herbert Bienstock, regional BLS commissioner, "New York is becoming the youth unemployment capital of the country." While New York did not have the highest official youth jobless rate (it was topped by Detroit, Baltimore and Washington), it showed the sharpest increase in jobless youth ages 16 to 19 among 11 major American inner-cities for the period 1970-76.

Very Low Youth Employment

The rates of youth employment have equally deteriorated during 1970-76, as shown in the table below. The best measure is the employment-population ratio, which expresses the number of employed as a percentage of the total working-age population.

By this measure New York is at the bottom of the list among these central cities. Only 21.9%--or less than one in four--of New York youths age 16-19 were employed in 1976. This was a severe drop from the 30.4% figure in 1970. The BLS translates this ratio for New York into numbers of people: only 113,000 of the city's youth population of more than one-half million were employed in 1976. Moreover, New York's youth employment-population ratio was only half the national average, which rose to 44.3% in 1976 from 42.3% in 1970.

EMPLOYMENT-POPULATION RATIOS FOR ALL YOUTHS, AGE 16-19, IN 11 CENTRAL CITIES, 1976 ANNUAL AVERAGES

	Employment-Population Ratio	
	1976	1970
New York	21.9	30.4
Baltimore	23.5	32.8
Detroit	25.8	37.6
Washington	26.1	39.1
Philadelphia	27.8	41.0
Cleveland	30.9	38.1
Chicago	33.2	N.A.
St. Louis	37.9	40.0
Milwaukee	38.3	48.7
Dallas	45.6	50.9
Houston	46.8	41.2

Source: BLS

But if youth employment is especially grim in New York it is scarcely better in these other cities. The youth employment-population ratios in 1976 were: Baltimore 23.5%, Detroit 25.8%, Washington 26.1%, Philadelphia 27.8%, Cleveland 30.9%, and Chicago 33.2%. For all of these cities, the ratio was far worse in 1976 than it had been in 1970, and was also far below the U.S. average for 1976 of 44.3%.

Black Youth Employment

The data above described youth employment figures generally in the great, aging cities of America. But the employment-population ratios for black youths alone, age 16-19, in these same cities are much worse than the ratios for all youths 16-19 in the same cities. As the table below shows, black teenage employment for the large inner-cities may be described as follows:

- Without exception, the employment ratios declined substantially from 1970 to 1976.

  In Milwaukee, for example, the employment ratio for black teenagers declined from 25.0% to 13.3%--the worst rate of all these cities.

- The ratios for black youths are much worse than for all youths. New York, for instance, showed a 13.5% employment ratio for blacks in 1976, compared to 21.9% for all youths.

  These two declines--the worsening of employment for black youths since 1970, and the huge gap between black and total teenage unemployment--indicates that if a crisis existed for young blacks in 1970, it had become a disaster by 1976.

EMPLOYMENT-POPULATION RATIOS FOR BLACK YOUTHS, AGE 16-19, IN 11 CENTRAL CITIES, 1976 ANNUAL AVERAGES

	Employment-Population Ratio	
	1976	1970
Milwaukee	13.3	25.0
New York	13.5	23.3
St. Louis	14.3	22.7
Philadelphia	15.8	28.3
Baltimore	15.9	33.3
Detroit	16.0	26.7
Chicago	18.8	N.A.
Cleveland	20.8	33.3
Washington	26.8	37.8
Houston	32.5	28.0
Dallas	45.6	50.9

Source: BLS

Rising Number of Dropouts

Two statistics emphasize the severity of the youth problems in inner-cities:

- In 1975, about 75% of the 18- and 19-year olds in inner-cities had left school and wanted full-time jobs.

- Because of very substantial high school dropout rates, about 60% of unemployed 16- and 17-year olds were seeking--but typically not finding--part-time or full-time work, mostly because employers feel that these youths are too immature to be hired, but also because of the many employment barriers below 18 years of age.

Certainly a third major factor harming youths in inner-cities is the overall decline in the number of inner city entry-level jobs and total jobs.

These declines can best be illustrated again by the case of New York City. New York's labor market decline has outdistanced that of other cities, but not to a very great degree. In New York, for every 100 jobs in each major industry between June 1969 and June 1976, the city lost the following number of jobs:

37	manufacturing
32	contract construction
21	transportation and public utility
17	wholesale and retail trade
10	finance, insurance and real estate
6	government
3	service

The Inequality of Joblessness

These job losses are not evenly distributed among various groups within the working age population. The following table illustrates the unequal burden of unemployment in the United States for the third quarter of 1977:

Black teenagers, 16-19, in urban poverty areas	43.0%
Black teenagers, 16-19	39.5%
Spanish-origin teenagers	20.7%
Teenagers, 16-19	17.7%
White teenagers, 16-19	15.0%
All blacks, 16 and over	13.6%
All Spanish-origin, 16 and over	9.5%
All persons, 16 and over, in poverty areas	9.4%
All females, 20 and over	7.0%
Veterans, 20-34	6.7%
All persons, 16 and over, in nonpoverty areas	6.4%
All whites, 16 and over	6.1%

This listing of the proportions of unemployment in America, by group, may be interpreted to reflect:

- Which groups face the greatest and most discriminatory job barriers.
- Which groups are most inadequately prepared for competing in the current labor market.
- Which groups are most handicapped in the labor market because of their physical location.

The Unemployment Centers

Typically, a doubling of the unemployment rate during 1970-76 occurred in these cities:

Washington
Milwaukee
Chicago
Philadelphia
Baltimore
Detroit
Cleveland
St. Louis
New York

Urban and employment deterioration has been almost as severe for a second group of major metropolitan areas:

Buffalo
San Francisco-Oakland
Los Angeles-Long Beach
Cincinnati
Pittsburgh

These may be fairly described as the 14 leading disaster cities for general unemployment and especially youth unemployment in the United States.

The Severest Problems: New York

Not only in youth employment, but in almost every other measure, New York's decline has been more severe since 1969 than that of any of the other deteriorating central cities. Although New York's working-age population declined by 1.6% between 1970 and 1976, its number of employed people dropped by 11.7%.

Even New York's black youths seem to be far worse off than the average for black youths nationally. The employment-population ratio for New York's black youths is only 13.5%, which is far below the national rate of 23.7% for black youths. This means that 86% of New York's black youths are not working; among white youths in New York City, 74% are not working. Even for white youths, the New York labor market is much worse than the national average.

The basic reasons for these grim statistics are rather well known. Since 1969, the flight of industry from the central cities has accelerated. For example, since New York's job drain began in 1969, the city has lost over 650,000 jobs. Youths breaking into the labor market have been the hardest hit.

Basically, the United States has not provided enough growth in entry-level jobs to match the growth of young people entering the labor market.

Historically, the two leading ports of entry into work for unskilled people have been farm and factory employment. But farm employment dropped from eight million just after World War II to about three million today. And factory employment in central cities has also declined sharply.

Moreover, technology has often wiped out the lower-level, routine jobs. The nation faces a shortage of the better-paying, entry-level jobs.

Fewer Teenagers

It appears that the manufacturing job loss in central cities may be bottoming out. Greater governmental measures to aid youth employment may be expected. Most important, the 1980s will show the effects of the sharp drop in births during the 1960s. Yearly births averaged three million in the early 1970s, compared to four million in the early 1960s. We may expect one million or more fewer youths to enter the labor market in the 1980s, compared to the mid-1970s.

This year, there will be 40,000 fewer teenagers of working age (16-19) than last year. In five years, there will be 1.2 million fewer working age teenagers than the 17 million in the population today.

By 1985, experts project that the U.S. may experience a shortage of young people for jobs in the low-wage occupations. But for the next several years, the youth unemployment rate may not drop at all, despite the population change and new youth programs

If youth unemployment rates remain the same, this means that 16 to 19 year olds will continue to account for 23% of the total number of unemployed people. The 20-24 year old group would account for another 23% of unemployment. Younger job seekers would continue to constitute about half the nation's unemployed.

The number of working-age teenagers not only peaked in 1977, but will continue to decline rather steadily throughout the next 15 years. The projections for teenagers are:

Year	Number of Working Age Teenagers (Age 16-19)
1962	11.2 million
1967	14.2 "
1972	15.9 "
1977	17.0 "
1982	15.8 "
1987	14.4 "
1992	12.8 "

For the 20-24 year old group, the total was 20.1 million in 1977. It will peak at 21.1 million in 1981, and then decline.

These declines will occur only among white youths. In 1967, there were 1.9 million nonwhite teenagers of working age. The total was 2.6 million in 1977, and there will still be 2.6 million nonwhite teenagers, age 16-19, in 1987, a decade from now.

Will the drop in the number of white teenagers affect minority youth unemployment? Will that unemployment rate drop below the current 40.7%, as compared to the white 14.3%? Since there are fewer blacks than whites, the minority youths will be a smaller target group to deal with. But many of these youths may still show the same strong deficiencies in basic skills such as reading and arithmetic. This may depend, in part, on whether the new federal youth programs are concentrated sufficiently on training and employing the most disadvantaged young people.

No Less Problems in 1982

This potential easing of youth employment problems by the latter 1980s does not offer much solace for the next seven to ten years. Are we as a nation to deal with a large group of people--during the next decade--who will be largely out of work in their teenage years and mid-twenties? Most experts believe that if people remain largely unemployed for the first ten years of their working life, they are exceedingly difficult to place in stable jobs afterward.

A further problem is that teenage unemployment may be expected to rise even higher in the next recession. Let us note the experience of the 1974-75 recession: as the slump began, the 14.6% teenage unemployment rate was triple the 4.8% rate for the whole work force. Over the next two years, 1974-75, the number of potential workers without jobs grew by 4.5 million people and teenagers bore a very large share of the losses. The teenage unemployment rate grew to almost 20% by the end of 1975, but counting the potential labor force, it was about 26%.

For black teenagers, unemployment grew to almost 40%, and is nearly as high today. Thus, in the next economic slowdown, the existing horrendous rates of teenage unemployment in the inner cities may only be raised further.

An additional adverse factor has been the decline in the number of young people entering the armed forces. This decrease was more than one million youths between 1968 and 1974.

All these factors suggest that, even if the labor market were to strengthen in 1980-82, teenagers as a group might experience 14%-15% unemployment at best, and black teenage unemployment might be reduced only to about 30%.

Multiple Handicaps of Ghetto Youths

For youths outside of the ghettos, unemployment is usually brief, except during recessions. It can be reduced by work-study programs, career education, on-the-job training and apprenticeship, and job placement services. Most youths show a high turnover rate as they experience the world of work. In 1975, about 65% of all unemployed teenagers were either entering or re-entering the labor market.

But these factors are radically changed for inner-city youths. Inadequate education and a lack of basic skills are far more pronounced. This suggests that very heavy reliance must be put on basic and remedial education, work-study plans, and subsidized on-the-job training.

Even then, the leading barrier is that a sufficient number of jobs do not exist: the unskilled and semi-skilled jobs in inner cities have been declining at least for the past decade. In sum, the jobs have left the cities, but the youngsters have not.

A further factor is the rapid increase in the proportion of minority teenagers who would like to be workers. This mismatch between these job-seeking youths and the existing jobs in inner-cities is very great. Today, jobs increasingly call for a level of education and skills which are not available among large numbers of inner-city youths.

These youths suffer from a combination of negative factors: they are harmed by racial stereotypes; they are less willing than previously to accept low-status and low-paid jobs; and they have been withdrawing from the labor force in very substantial numbers.

Focus on Nonwhite Teenagers

To summarize the teenage unemployment trends, it is clear that teenage unemployment has been pushed sharply upward during the last two decades by:

1) a rapid growth of the teenage labor force

2) a decline in the number of entry-level jobs appropriate for teenagers

3) the entry or re-entry of large numbers of women into the U.S. labor force.

Very high unemployment has become the dominant characteristic of nonwhite teenagers. Among the reasons for this high nonwhite joblessness have been:

- The geographic concentration of minority teenagers in the inner city.

- A rapid increase in the number of minority teenagers (this increase will continue while the population growth of white teenagers will diminish).

- A reduced willingness by minority teenagers to accept low-status and low-paid jobs.

- Higher absenteeism and higher dropout rates of nonwhite teenagers in the school systems. Also, a decline in school quality.

- Racial and educational discrimination in the labor market, generally characterized by an inflexible "credentialism" in the selection process.

AGE STATUS DIFFERENTIALS AND INTERVENTION STRATEGIES

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To understand youth labor market problems as well as to design effective solutions it is necessary to consider the ways that chronological age impacts upon the work related behavior of low-income youth. Age, like race and sex, must be viewed within some social-cultural context. Societies through their institutions define what is appropriate and, hence, expected of individuals throughout the course of their lives. The more complex the society, the greater the degree of age-related expectations.

> Differentiation in the life course arises from social meanings of age, as well as from biological facts of birth, sexual maturity, and death. Throughout history and across cultures these social meanings have varied, as evidenced by shifting meanings of 'childhood'. Norms, expectations, privileges and constraints express societal distinctions regarding age. Age strata are socially recognized divisions of the life span which constitute a basis for identity and specific appropriate behavior. In complex societies age structure and timetables are plural; the individual life course is comprised of interlocking careers, such as those of work, marriage, and parenthood. There are cultural definitions of appropriate times for schooling, leaving home, marriage, and childbearing. As a rule, individuals are aware of how the timings of their lives fit with cultural timetables and with the consequences associated with off-timed events. Extreme departures from cultural timetables often entails decisions among undesirable options, and formal and informal sanctions.[1]

The problem for both the individual and the society emerges when there is a discrepancy between age-based societal expectations and the status of the individual. The dilemmas of the unwed teenage mother, the high school dropout, the unemployed adult, and the retirement-resisting elder are all examples of a lack of fit between age-based cultural norms and individual behavior.

Age-based definitions of appropriate and expected behavior are neither monolithic nor static. America was the first country to introduce the term "adolescent". The phenomenon of "adolescence" was named at the turn of the century by G. Stanley Hall.[2] Adolescence signaled the emergence of a period of life beyond childhood but before adoption of adult responsibilities. It was introduced as a term to differentiate between those children who went into the labor force and those who went on to high school. As the proportion of the childhood population going on to high school continued to grow, the period of adolescence began to encompass the total age group fourteen to seventeen. By the 1950's, there were more than a few sociologists who supported the proposition of the existence in America of a distinct "adolescent society."[3]

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[1] Glen H. Elder, Jr. and Richard C. Rockwell, "The Life-Course and Human Development: An Ecological Perspective," International Journal of Behavioral Development, Vol. 2, p. 3, 1979.

[2] G. Stanley Hall, Adolescence: Its Psychology and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion, and Education, Appleton, New York, 1904.

The concept of adolescence emerged when America entered the industrial period of its economic development. With industrialization came the need for a more skilled and specialized labor force. Obviously, the task of preparing youth for more elaborate and complex work could not be undertaken by either parents or existing educational institutions. Fulfilling the perceived human resource needs of the changing social and economic order increasingly became the responsibility of a longer and more extensive formal educational process. New laws and institutions were directed at protecting, insulating, and preparing the young for adulthood.

> But as our society moved into the modern era, the structure became progressively more a matter of movement into activities different from those of the parents. A long period of formal training, under specialized instructors, was initiated to provide the cognitive skills seen as necessary for satisfactory performance as an adult, and equality of opportunity itself required postponement of decision. To accomplish these tasks, institutions to provide the instruction were designed and roles were formulated with respect to school and work. Specifically, schooling to an advanced age became compulsory, and automated promotion, age by age, became the norm. Laws were established against child labor, and minimum wages were specified. These latter not only served their prime function of protecting the economic security of the bread winner, but also delayed the entry of the young person into the labor force.
>
> In consequence, the schools and colleges have come to provide the general social environment for youth. The world of the maturing child formerly dominated by the home, is now monopolized by the school and on the informal level by the age group.[4]

With growing numbers of young people investing more and more of their years in formal education and hence prolonging the embracing of adulthood, it was not surprising that yet another post-child pre-adult social category would emerge.

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[3] David Gottlieb and Jon Reeves, Adolescent Behavior in Urban Areas, Free Press, New York, 1963.

[4] Youth: Transition to Adulthood, (Report of the Panel on Youth of the President's Science Advisory Committee), June, 1973, p. 1.

In 1970 Kenneth Kenniston described the phenomenon of youth. Kenniston noted, as Hall had done for adolescents, that there was a new period of life following adolescence but prior to the assumption of adult responsibilities.[5] He called this period "youth" and the term youth has come to be more and more widely used for a segment of the population, some of whom are adolescents, some of whom are beyond adolescence, but not yet in full adult status.

These developmental constructs conjure up numerous qualifications about the individuals' attitudes and behaviors. However, the fact remains that chronological age alone is not a terribly reliable predictor of either attitudes or behaviour. The use of chronological age as a defining category is arbitrary at best. Leaving aside the impact of such critical intervening variables as sex, race, ethnicity, and social class, we know that young persons of the same chronological age differ widely in rates of physical, social, and cognitive maturation. Age groupings are more frequently a result of analytical convenience than a product of empirical conclusion. Further, age grades are placed within social categories which reflect societal expectations for specific attitudes and behaviours. Examples of the capriciousness and, at times, dysfunctional quality of these categorizations are, indeed, numerous. Youth are frequently prohibited from being employed in work settings demanding hard labor even though they have the physical capacity to handle such tasks. The armed forces direct their recruitment efforts at those eighteen through twenty-five even though older age groups are better prepared, both socially and psychologically, to deal with many of the complexities of military life. Bonding companies will deny insurance to individuals solely on the basis of chronological age. Employers will discriminate against youth who have not reached ages eighteen through twenty-one, no matter the demands of the job or the abilities of the individual.

The point here is not to advocate the universal rejection of age as a factor in employment considerations. Obviously, there are instances where chronological age differentials are appropriate and probably the most efficient and equitable variable available. Rather, our purpose here is to point out the capricious, arbitrary, and at times, dysfunctional consequences of such groupings. Age groupings and the social categorizing of young people does not flow from any physical law or process. These are societal creations, and, hence, they should be subject to change when found to be inequitable, unproductive, and detrimental to both the individual and society.

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[5] Kenneth Kenniston, "Youth, A (New) Stage of Life, "American Scholar, Vol. 39, 4 (Autumn).

The bulk of youth-related employment data consists primarily of statistics noting the number of people in or out of the labor market, the number employed full time, part-time, or unemployed. These same data are displayed in a manner that allows for comparisons between whites and non-white youth (only recently have Hispanics been awarded their own analytical category), youth of different age groupings, males and females.

The Bureau of Labor Statistics, utilizes the following age breaks:

16 - 19 years

20 - 24 years

25 - 54 years

55 years and over

These classifications are hardly suitable for those concerned with noting differences between those aged sixteen, seventeen and eighteen. Frequently, the data categories have forced analysts into "Procrustean beds," leading them to ignore the problems of 14- and 15-year-olds, and give inadequate attention to the average differences between 16-17 year-olds and 18-19 year-olds.

With few exceptions there is a paucity of hard data dealing with the day-to-day business of how the young negotiate relationships between themselves, teachers, parents, police, or employers. The available data cannot tell us how much of current youthful unemployment is the result of external barriers over which youth have minimal control and how much is the result of inadequate skills or motivation.

Despite a massive investment in national longitudinal studies, we are still unable to answer the question as to why youth of similar age and backgrounds pursue significantly different life styles; why some remain in school while others do not; why some follow delinquent and criminal paths while others do not; why some find employment while others are entered into the "discouraged-out of the labor force" category.

Yet even when data are available, there is serious question as to its accuracy or meaning. For example, when a comparison is made of youth unemployment statistics, as presented by the Current Population Survey (CPS, upon which unemployment rates are based) and a national longitudinal survey (NLS) for a similar period of time, significant differences are apparent.

Unemployment for in-school males, ages sixteen - seventeen, was reported as 17.4% by NLS and 9.2% by CPS, a difference of some nine percentage points. For out-of-school males of the same age, there is a reversal with CPS citing a figure which is nine percentage points greater than that reported by NLS.[7]

Questions can also be raised as to both the validity and usefulness of collected data. A pre-testing of questions utilized by both NLS and CPS showed that many respondents, particularly Hispanic youth, did not understand the meaning of certain words and concepts. Questions included in most employment surveys ask the respondent whether or not he or she has looked for work during some specified period of time. Through personal interviews with a sample of low income youth, it was found that "looking for work" means different things to different people. For some, looking meant thinking about looking; for others, it meant studying want ads; for others it meant talking to a friend about work; or going to an employment office; or actually participating in a pre-employment interview. Each respondent, however, answered in the affirmative when asked if they had looked for work.[8]

There are still other data problems. Each year some 400,000 people ages eighteen through twenty-four enter the armed forces. The military absorbs roughly a third of all non-college bound male youth. Most are from lower income backgrounds and a disproportionate number are non-white. Information as to why these youth enroll in the military is lacking. Similarly, the extent to which the military experience enhances civilian employment opportunities is not known. Nor can we say very much about the reasons why large numbers of volunteers (the estimates range from 30% to 40% for the Army and Navy) leave the service prior to completion of the first term of enlistment. Given that the military has traditionally been viewed as an important mechanism in the youth-adult transition, it would seem beneficial to find out the causes of attrition; what happens to those who do attrite; and relationships between military service and the post service life course.

Data deficiencies are also apparent when we seek to determine the effects of school enrollment and school attrition on work related behavior.

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[7] Policy Options for the Teenage Unemployment Problem, Background Paper No. 13 (Washington; Congressional Budget Office, 1976), p. 2.

[8] David Gottlieb, Barriers to Social and Occupational Mobility: Personal Interviews with Low Income Youth, University of Houston, 1979.

Parnes and Kohen concluded from an analysis of NLS data that:

> Just as we know too little about which types of training have the greatest payoff, so we are plagued by a rather abysmal ignorance of the real nature of the contribution that the educational process makes to labor market success. The data reviewed in this paper makes it clear that youth with more education do better, but why that is so we really do not know. Nor do we know what types of educational experience are most likely to prepare youth well for various kinds of careers.[9]

While unemployment rates are associated with levels of higher education, the gap continues to narrow.

> In 1968, the unemployment rate of 18-24 year olds with less than four years of high school was 5.9 times those with four years or more of college. In 1976, the comparable ratio was 3.8. In terms of percent increase, the unemployment rate increased 89 percent of those with the lowest educational level during the eight year period. A similar pattern of unemployment and level of education is shown for those 25-34 years of age, thus supporting research that suggests the economic payoff of education has declined.[10]

Similarily, Stephenson reports, utilizing NLS data for 1966 and 1971, that:

> Job holding in school reduces expected unemployment duration for white and black youth below that of NLF (non-labor force) students. Furthermore, previous job holding, especially job holding while a student, sharply increases relative post-school hourly wage rates.[11]

[9] Herbert S. Parnes and Andrew I. Kohen, "Labor Market Experience of Noncollege Youth: A Longitudinal Analysis", From School to Work: Improving the Transition, National Commission for Manpower Policy, Washington, D.C., U.S. Government Printing Office, 1976, pages 57-83.

[10] "Indicators of Youth Unemployment and Education in Industrialized Nations", National Center for Education Statistics, Washington: U.S. Government Printing Office, 1978, p. 93.

[11] Stanley P. Stephenson, Jr. "Schooling, Work Experience, and Unemployment Impacts on Male Youth Wage Rates:, Unpublished, January, 1979.

While this finding holds intriguing possibilities for employment enhancing policy, it fails to answer several important "why" questions. Is the critical variable in school employment or student motivational differences? Are students who hold in-school employment different from those who do not undertake such employment? Why do some students seek and find in-school employment while others do not? What differences are found when there is control for age and race? If all youth were provided equal access to the same employment opportunities would the factor of in-school employment still make a significant difference?

There is evidence to suggest that the employment enhancing potential of the high school diploma may have less to do with cognitive skill attainment than with the social definitions assigned to those who do or do not complete high school. The high school diploma is a credential seriously considered by employers. A report of corporate hiring practices prepared by the National Commission for Labor Policy concludes with the following observation:

> The education distribution among new hires 16-21 in retail firms finds 74 percent with a high school diploma or higher; 24 percent in school (secondary and post secondary); and 1.7 percent high school dropouts. For the manufacturer, the education distribution of new hires finds 96 percent of salaried (new hires) were high school, technical school, or apprentice graduates or higher. The remaining 4 percent of salaried and 18 percent of hourly workers included dropouts and workers still in school.[12]

Again, there are few who would strongly argue that the holding of the high school diploma alone will significantly influence work skills or work productivity. Rather the high school diploma requirement acts to screen out the youngest employees since age is highly correlated with formal schooling achievement. Further, in a society where high school graduation is the norm, the dropout is viewed as too much of an employment risk. Failure to complete high school is considered to be evidence of a lack of maturity, stability as well as indicating a lack of intelligence.

Utilizing special data from the Bureau of Labor Statistics, Barton shows that when comparisons are made of male high school graduates employed in 1969, of those ages 18 and 19, 58% were operatives or non-farm laborers.[13] For the age range of 25 to 44 of the same educational level, only 27% were in these occupations. Further, a comparison of a wider range of occupational groupings shows that among males of the same age, 18 and 19, no significant differences are found in occupational distribution when comparisons are made between high school and non-high school graduates.

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[12] "Corporate Hiring Policies" Improving the Transition, p. 43.

[13] Paul E. Barton, "Youth Employment and Career Entry" in Seymour L. Wolfbein, Labor Market Information for Youth, Philadelphia, Temple University, 1975, p. 85.

Military service enlistment policies reflect the belief that the high school diploma is more a measure of "maturity and stability" than an indicator of intellectual achievement. The Army, for example, places greater importance, for recruitment purposes, upon the high school diploma than the earning of the GED credential. A review of the armed forces attrition literature as well as discussions with military manpower specialists would lead to the conclusion that possession of the high school diploma is considered to be the best single predictor of in-service behavior as well as attrition from the service, again, not because military authorities would argue that a high school diploma represents a specific level of academic or skill attainment but rather it is a social credential verifying the fact that the youth has stayed in step with societal norms and expectations.

There are yet other data problems which act to preclude precise statements as to relationships between chronological age and work/school experiences. Current methodologies utilized for the measurement of youth unemployment are not without serious limitations. To be included in the official definition of "unemployed" a person must be at least 16 years of age, without a job, and available and looking for work. An individual who works, however briefly, for wages during the survey week is considered employed. Thus the definitions of employed and unemployed are arbitrary and no doubt result in findings that tend to underestimate both the degree and nature of youthful unemployment. For example, a youth looking for full time employment would not be cited as being unemployed if he or she held a part-time job for only one hour during a one week period.

Finally, assuming that there is some positive relationship between data generation and knowledge, we would need to conclude that we know more about youthful males than we do about females; more about the affluent than the poor; more about white youth than non-white youth; more about those in school than those out of school; and more about those employed than those out of work. Obviously, the more institutionally accessible the youthful respondent, the more likely the probability of his inclusion in research studies. Hence, it is not surprising that the group we know the least about are those youth who represent our most serious unemployment problem-those youth who are neither in school, in the service, or employed.

An analysis of work/school intervention strategies would indicate that there has been a reluctance to examine and deal with societal and institutional barriers to youthful employment. The fixed social categorizing of the young can only contribute to institutional arrangements which will enhance age-related discrimination and an insistence upon credentials which are frequently irrelevant to the demands of the job.

The exclusion of the young from serious, continuous work opportunities does contribute to the existence of two labor markets--one for the young and one for adults.

> Teenage employment is different, even for those working full time, and even when they have been certified with a high school diploma. To make the point a distinction will be made between 'youth jobs' and 'adult jobs' or 'regular jobs'. It is not a precise one, and all jobs cannot be neatly placed into one category or the other. But roughly speaking, the distinction exists, and it is important to recognize it.[14]

In matters of youth employment and training and formal schooling, too much of the burden of proof is placed upon the youth and perhaps too little upon those institutions responsible for providing youth with meaningful work and learning opportunities. This is not to suggest that many youth, particularly poor youth, are not in need of or could not benefit from exposure to specially designed intervention programs. Nor are we proposing that all youthful employees are reliable or responsible in their work-related behavior. Rather we take the position that an exclusive focus upon the shortcomings of youth is neither sufficient nor justified. It avoids the hard facts of shrinking job opportunities; increased competition in job entry; governmental regulations which impose restrictions on the hiring of youth while raising the costs of youth employment; a reluctance on the part of employers to hire the young, particularly those who have not completed high school and those of minority group status, and that many of the jobs now available to low-income youth, particularly those youth who have not completed high school, do not require much in the way of skill training and do not represent an opportunity for career stability or job satisfaction.

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[14] Paul E. Barton, op. cit., p. 91.

Recognizing the existance of serious data limitations; a societal decision to prolong the transition from childhood to adulthood (thereby, of course, increasing the isolation of the young from the realities of the labor market); and the numerous external factors which act as barriers to youth employment, we turn now to the issue of chronological age of youth and transition related behaviors.

No matter the variety of explanations offered, there is data consensus in the fact that employment does increase with age. With time, there is growing fit between the developmental stage and the workings of the employment market. Youth and young adults, more so than adolescents, possess both the maturity and work-enhancing credentials required by employers while employers are more accepting of those who are older.

One factor contributing to employer reluctance in hiring the young is job mobility. It is not uncommon for those under age 25 to explore a variety of job alternatives prior to making a career choice. Whether in school or out of school, full-time or part-time workers, those ages 16-24 do show active patterns of job changing.

Labor turnover rates for 1976 show the following age related patterns:[15]

Age Group	Two Employers (Percent)	Three or More Employers (Percent)
16-17	16.0	5.6
18-19	22.8	11.0
20-24	20.7	9.5
25-34	13.3	4.3
35-44	8.7	0.7

The life-cycle approach utilized by Osterman supports the view that as young people age, their unemployment rates become increasingly more dependent on the national rate and less predetermined.[16]

> The labor market operates as a teaching and channeling mechanism. Three major stages in labor market behavior of youth can be identified. The moratorium stage is categorized by young

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[15] Paul E. Barton and B.S. Fraser, Between Two Worlds: Youth Transition from School to Work, Center for Education and Work, National Manpower Institute, August 1978, p. 68.

[16] Paul Osterman, "An Empirical Study of Labor Market Segmentation, " Industrial and Labor Regulations Review, 28 July, 1975, pp. 508-523.

> people who are occasionally in the labor market, but for most of whom work is not a primary concern. This covers 16-19 year olds who hold part-time after-school jobs, summer jobs, or temporary jobs for extra money or additional support. The jobs are in the secondary labor market as described by dual market theory.
>
> The exploration stage cover ages 20-24. Now the young person actively explores the labor market. Jobs are 'bridge jobs" in that they provide training, occupational information, and work habits. They are often in small businesses, because youth are less dependent on a steady income, will accept lower pay, and desire training. Exploration encompasses both job search and the sampling process.
>
> At the end of exploration, the individual discovers what he/she likes to do and secures a job through a reciprocal arrangement between the smaller and larger (primary job's) firm. This is the third stage of settling in, which occurs at about age 25. Statistics reveal that unemployment rates decline rapidly at this stage.[17]

The general trend of the results of numerous studies is that vocational goals and plans become increasingly specific, stable, and realistic with advancing age and goals.

> Before 10, needs and fantasies predominate. Between 11 and 12, preferences are primarily a function of interests, but between 13 and 14, abilities and job requirements come to be considered. The age span 15-24 is an exploratory period, beginning with tentative choices at 15-17 based on simultaneous evaluation of needs, interests, abilities, values, and opportunities. During the transitional phase (18-21), the individual is still working out his self concept, but he enters the labor market or advanced training and realistic considerations are given more weight. By age 22-24 a specific occupation has usually been selected, a job secured, and a trial period is underway. If the job proves unsatisfactory, another trial phase may ensue before the person becomes occupationally established.[18]

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[17] Youth: Transition to Adulthood, op. cit., p. 105.

[18] Career Thresholds: Vol. VI, U.S. Department of Labor, Rand D Monograph 16, Washington, U.S. Government Printing Office, 1977.

NLS data indicate that over time, there are changes in both the educational and occupational goals of male youth ages 16 through 24. Differences are found between those in and out of school (1966) and black and white males. Briefly, about one-fifth of the white and one-fourth of the black college students who aspired to post baccalaureate study as of 1966 had revised their goals downward by 1971. Among whites in colleges in 1966, one-third had achieved the educational goals they set for themselves as compared to only one-tenth of the black males. The greatest gap between 1966 educational goals and 1971 realities was found among those youth classified as dropouts. Only one in twenty high school dropouts who in 1966 desired to acquire a high school diploma actually returned to school during the ensuing 5 years. Still, the authors point out, three-fourths of the dropouts who sought additional schooling in 1966 continued to express a similar desire in 1971, despite the fact that they had been out of school for a 5-year period.

Significant changes do occur in the occupational goals of those youth who were not enrolled in school in 1966. The change, as would be expected, reflects a downgrading in occupational status levels. Again, the shift is most pronounced for black male youth. Indecision about career goals declined only moderately during the 5-year period.

The NLS data also show a substantial downgrading in the occupational goals of those who were in school in 1966.[19]

This decline in the status level of occupational goals is seen as reflecting the shift from the transitional stage of career considerations to the stage of career exploration and job commitment. With time, youth become more aware of job dimensions; more realistic in their career goals; and more career specific. Several points should be raised with regard to these career development constraints. First, they are based almost exclusively upon studies of males. Secondly, the length of the developmental stage is very much a social/cultural product. As we have extended the period of socialization of youth, we have also extended the experimental and exploratory phases of career decisionmaking. In less industrialized and less complex societies, career commitments are made at an earlier age than is the case in the U.S.

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[19] R.P. Quinn, et. al., Job Satisfaction: Is There a Trend?, U.S. Department of Labor, R and D Monograph, No. 30, Washington: U.S. Government Printing Office, 1974.

Studies dealing with job satisfaction indicate that age is a critical variable. Younger workers tend to be less often highly satisfied than older workers and teenagers are less satisfied than older young workers. These same studies do note that black workers are less likely than their while counterparts to be highly satisfied with their jobs. These findings would be expected given that these same studies show that the higher the status of the job (i.e. professional-technical workers and managers, officials and proprietors versus operatives and laborers) the greater the expressed job satisfaction. Younger youth and nonwhite youth particularly are, of course, overrepresented in these lower level occupations. Still, there does appear to be a general pattern of decline in job dissatisfaction with increase in age.[20]

The lack of relative stability in fulfillment of work and school responsibilities is considered characteristic of the young, particularly those classified as teenagers or adolescents. While sex, institutional settings, socio-economic status, and familial composition will produce variations in performance, much less than predictable or preferred behavior is considered an integral part of youth development. Data from a wide range of studies do support the proposition that high school age youth are more likely than older youth to be absent from school and work; to engage in disruptive behavior; fail to complete school and work assignments; and to be most transient in the labor market. Similar findings are reported for low-income youth enrolled in government sponsored work/education programs. Younger enrollees (less than 18) are less likely than older youth enrollees to remain with a program through completion, exhibit higher rates of program absenteeism, and more likely to be terminated from programs for behavioral or performance reasons.

In the case of the army, enlistee attrition is found to be almost twice as high for high school dropouts than for youth who have achieved the high school diploma. At the same time, age of the enlistee, regardless of high school credentials, does contribute significantly to both first term service completion and in-service performance. Enlistees under the age of 19 are found to be the most difficult group to deal with in the soldier socialization process. They are more likely not to complete the first term and they are most likely to be judged as behavior and disciplinary problems.[21]

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[20] Work Attitudes and Work Experiences: U.S. Department of Labor, R and D Monograph No. 60, Washington, U.S. Government Printing Office, 1979, p. 2.

Chronological age changes are also associated with changes in psychological and ideological development. Again, while the data are not complete, there is general agreement that as adolescence progresses "self-preoccupation shifts toward personal traits and values, vocational aims, and heterosexual roles. Moral standards become more internalized and individualized and concern with philosophical, ethical and political issues rises. Despite the public prominence of some youthful social and political 'activities', participation in citizenship roles is not, on the average, any greater than among adults. However, concern and responsibility for others, our ideal for healthy adulthood, typically becomes stronger and more highly channeled when the individual has achieved some measure of independence, autonomy, and 'identity'.[22]"

With youthful aging comes what some describe as increased cynicism and others realism. Adelson, making comparisons between students ages 12 through 18 notes that with increasing years of age there are significant changes in attitudes pertaining to the resolution of social problems. While 52 percent of those age 12 express an optimistic opinion about the eventual elimination of crime, only one-fourth of the 18 year olds hold a similar positive view.[23]

It is in the earlier years of adolescence that the young tend to be most vulnerable to involvement in individually harmful and socially dysfunctional behavior. Social scientists attribute this increased vulnerability to two factors: First, early adolescence is the start of exploration and experimentation when the individual moves from primary concern with self to interactions with others. Generally, it is considered a stage of development when the individual must begin to deal with tasks of:

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[21] First Term Enlisted Attrition, Vol. I (edited by H. Wallace Sinaiko) Manpower Research and Advisory Services, Smithsonian Institute, Washington: June 1977.

[22] Youth: Transition to Adulthood, op. cit., p. 110.

[23] Joseph Adelson, "The Development od Ideology in Adolescence," in Adolescence in the Life Cycle, (edited by S.E. Dragestin and G.H. Elder, Jr.), Washington: Hemisphere Publishing Company, 1975, p. 73.

1. Acceptance of one's body.
2. Accepting a masculine or feminine role and proper relations with both sexes.
3. Emotional independence of parents and other adults.
4. Achieving assurance of economic self-reliance in the selection of educational and occupational alternatives.
5. Developing intellectual skills and concepts necessary for civic competence.
6. Preparing for marriage and family life.[24]

Secondly, early adolescence is a stage where the individual becomes heavily involved with peer group activities and influences. A period where more and more of the young person's time is spent in relative isolation from others of dissimilar age and grade statuses. The influence and impact of the adolescent peer group has, of course, been the focus of many studies, novels, and media presentations.

The combination of individual developmental needs and peer pressures can act to enhance dysfunctional and socially inappropriate behavior--all the more likely when the young person has limited alternatives and little in the way of helpful adult role model guidance. Hence, we would expect to observe growing rates of delinquency and non-normative behavior among even the youngest of adolescents. More particularly among those youth most estranged from approved socializing institutions and supportive alternatives. Low-income youth, particularly those of minority group status, are confronted then not only with the pressures characteristic of the adolescent stages of development but with the added burdens of restricted socially endorsed alternatives and limited access to rehabilitative resources.

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[24] David Gottlieb and Charles Ramsey, The American Adolescent, Homewood, Ill., The Dorsey Press, 1964, p. 124.

See also Erik H. Erikson, Identify: Youth and Crisis, New York, W.W. Norton and Company, 1968, Data dealing with crime and drug abuse more than suggest that those behaviors have become increasingly the domain of younger and younger individuals. More disturbing, perhaps, are the data from followup studies that the younger age of the offender, the less likely the probability of successful intervention and correction.

The report issued by the U.S. Department of Justice includes the following observation:

> There has been a steady increase in the percent of youth arrests from 1960 to 1975. The increase in the total number of arrests reflects an increase in criminal activity and is more noticeable among the 13-19 year age group.[25]
>
> The age group 13-19 accounted for 14.6 percent of all arrests in 1960 and 34.2 percent of all arrests in 1975. An increase of more than 100 percent in a period of 15 years. The rate for youth, as a percent of all arrests, ages 20-24, was 27.3 percent in 1960 and 19.7 percent in 1975. An increase of less than 10 percent during the same 15-year period.

These same data also show that there has been a significant increase in the proportion of youthful female arrests.

A firmly established finding in criminological research is that of a predominately inverse relationship between age and recidivism. Glaser states:

> One can generalize with much confidence for any large cross-section of offenders that the older a man is when released from prison, the less likely he is to return to crime.

Further,

> The younger a prisoner was when first arrested, convicted, or continued for any crime, the more likely he is to continue in crime.[26]

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[25] U.S. Department of Justice, The Federal Bureau of Investigation, Uniform Crime Reports for the United States, Washington, D.C., 1960, 1965, 1970, 1975.

[26] Daniel Glaser, The Effectiveness of a Prison and Parole System, Berkley, Sage Publications, 1976, pp. 38-39.

Studies of drug use, self reported, show a similar pattern. The reported use of marijuana in 1972 among youth ages 12-17 was estimated at 14 percent. For 1976, marijuana use for the same age group was found to be 22 percent. The 18-24 year old age group were shown to have the greatest proportion of admitted marijuana users (53 percent in 1975) followed by the 16-17 year old group with a users rate of 40 percent in 1975.[27]

An age related finding of drug use in New York State provides added support to the proposition of growing drug use among the youngest of youth:

> Teenagers (age 14-19) are the most likely group to be currently using drugs. For example, 71 percent of the teenagers involved with cocaine were using this drug within 6 months of the survey. Teenagers also have a higher rate of new users for all illegal drugs except solvents, and for all legal drugs except analgesics. Over three times as many teenagers began using heroin in 1975 as people in any other age group.[28]

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[27] Resource Analysis Corporation, Non-Medical Use of Psychoactive Substances, Princeton, 1976.

[28] New York State Division of Substance Abuse Services, Drug Use in New York State, New York, 1978, p. 39.

Program Implications

Based upon this analysis of the literature, serious consideration should be given to the implementation of age/institutional based programs--that is, programs which take into account individual age/grade and institutional location of the individual.

Three programmatic thrusts are offered:

1. Ages 14 - 17: Enrolled in School

These are youth who are meeting societal expectations with regard to age and institutional location. Given the developmental needs of this age group, their high probability for entrance into delinquent and dysfunctional activities, and extremely limited opportunities for employment, the thrust should be on maintaining continued school enrollment. When necessary and appropriate, financial support and/or incentives should be provided in order to maximize school retention. Heavy emphasis should be placed upon the provision of guidance and counseling services, career exploration, exposure to world of work, and career education would in all probability be of some benefit. Activities and courses which allow the student to see a direct relationship between current in-school requirements and post-school career opportunities are critical.

The vulnerability of this age and socio-economic group to potentially harmful peer influences and behavior demands that competitive-benefical alternatives be provided. Particular concern needs to be given to programs and activities which will minimize probabilities of drug abuse, delinquency, and for females, unwanted pregnancy.

In summary, the goal should be maximizing in-school retention, exposure to career and world of work knowledge, and minimizing involvement in behaviors detrimental and costly to both the individual and society.

2. Ages 16 - 18: Not Enrolled in School, Dropouts, Unemployed

These youth are confronted with a triple burden: They are out of step with societal expectations; they are viewed as being among the least desirable of candidates for employment, and they are highly susceptible to involvement in serious anti-social and personally damaging behavior.

The school, employment and organized program staying power of this category of youth is questionable at best. The program and policy emphasis with these youth should be directed at re-linking with established and approved socializing agencies. Their early departure from school reflects an inability to accept traditional modes of education, hence, the need for programmatic flexibility and variety. Further, the behavioral mode of this group is such that they are not good risks for programs calling for dramatic adjustment to new settings.

For that reason, we believe the focus should be on more locally based program settings.

The programmatic thrust here would be on efforts incorporating a combination of educational and pre-vocational activities. Part-time school linkages with an introduction to basic work and job related skills should, we believe, be the programmatic emphases.

As in the case of in school youth of similar age, financial support and incentives should be utilized when necessary and appropriate.

The vulnerability of this group to harmful external influences calls for more in the way of one-on-one guidance and instruction as well as the providing of opportunities for exposure to successful role models.

Youth, ages 16 to 18, who are out of school, have not completed high school, and are unemployed present the most serious challenge to programs of intervention. They have, to this point at least, achieved few, if any, socially endorsed goals; they have failed in school; they have accomplished little which would contribute to an affirmative self concept; they have minimal cognitive and vocational skills; and only a handful have reached a developmental stage where one begins the frequently painful assessment of self and realistic life course alternatives.

Traditional styles of instruction and curriculum, as well as traditional methods of student grading will only exacerbate social alienation and hostility.

Programs should be relatively small thereby enhancing monitoring, individual guidance, and curricular innovation.

Obviously, this group of youth would benefit from much that was proposed for the in-school adolescents. The intervention task, however, is one of greater magnitude hence calling for more comprehensive support and understanding.

3. Ages 19 - 24: Not Enrolled in School, Unemployed

With the exception of those whose physical or psychological status prohibits training or employment, this group would probably be most responsive to appropriate intervention efforts.

From a developmental perspective, they are the cohort most amenable to the deferment of immediate gratification and most inclined to be concerned with establishing more permanent and predictable life styles.

From an institutional perspective, they are of an age where placement opportunities are most readily available. Because of their age and developmental status, they are viewed as better risks than youth of a younger age. Employment, military, programmatic, and educational attrition data would tend to support the proposition that this particular age group would be most prepared to deal with the realities, responsibilities, and demands of adulthood. This age cohort would be less threatened than younger youth by placement in programs or employment away from their place of residence. Further, they would be better able to cope with the problems of mobility and adaption to new surroundings.

Available data also indicates that significant numbers of this age group are eager to participate in programs which will enhance educational and employment opportunities. We noted earlier, for example, that a majority of youth in interviews in the NLS project who had departed high school expressed a desire to return and earn a high school diploma. More important, five years later the majority continued to express a similar desire.

The greater motivation and maturity of this group would suggest the need for more intensive and more focused intervention efforts. Far less in the way of attitude shaping programs and much more in the way of specific job skill training; less in the way of guidance and counseling and more in the way of assistance in linking with educational and employment opportunities. The goal should be the providing of training and support which will enhance rapid movement into further formal education for those who seek such an opportunity and a similar connecting process for those willing and able to undertake long-range employment commitments. Adult jobs for adults.

With regard to employment, the emphases should be placed upon settings, private sector preferably, where the individual perceives opportunity for job permanence and career advancement. Intervention strategies which would allow for dual participation in work and school would be of significant benefit.

Finally, this age group, more so than those who are younger, are in need of basic instruction fundamental to life in a complex society. Instruction and guidance in matters of money management, nutrition, consumerism, and citizen participation.

TEENAGERS: WHAT ARE THEIR CHOICES ABOUT WORK?

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The Constraints on Choice

If we look at the labor market through the eyes of teenagers, we see a series of barriers erected by outside forces. If we ask how much choice teenagers have in the labor market, we must allow that they have no choice about where they were born and reared, nor about their parents' race and socioeconomic status. They likewise have no choice about the education system in their community, and little or no choice about the local transportation system. Moreover, even within these limits, their choices are bound by considerable ignorance of the alternatives available to them in the world of work. Yet we know that the youth's education and training and parents' socioeconomic status are major determinants of labor market success, that the amount of labor market information young people have makes a difference in the jobs they ultimately attain, and that lack of transportation is a widely perceived barrier to desirable employment. What can be done to break down these barriers?

Some of them can be eliminated: we can provide better knowledge of the world of work and better training, and we can encourage communities to invest more in schools, transporation, and health programs. We can also provide funds for improved social services, encourage housing code enforcement, provide nutritious meals, and generally try to improve the quality of life in poor neighborhoods. In doing so we will improve the labor market prospects of young people.

It is more difficult to eliminate widely-held discriminatory attitudes which have the effect of making accidents of birth like minority race, sex, and ethnic heritage disadvantages to employment. Until these regressive attitudes are eliminated as forces in our society, we should take compensatory measures to serve the needs of minority young people who suffer labor market disadvantage because of them.

Since 1966 the Employment and Training Administration has supported long-range research projects which make it possible to describe the behavior of youth in the labor market. Such descriptions are extremely valuable. We are much better prepared to suggest how to change labor policy and intervene in the market because we have a reasonably detailed view of 10 years of labor force experience for a nationally representative sample of young people. The following suggestions are based on this long-range research from the National Longitudinal Surveys and on extensive reviews of other studies which clarify our view of youth in the work world.

Inequality of Opportunity Begins at Home

Family background has a powerful effect on a young person's success in the labor market; however, the family's influence is indirect. For both blacks and whites, family background has a strong effect on the amount of education young people receive; this in turn has considerable impact on the types of jobs they get. For white young men, parental occupation is as important as the young man's I.Q. in predicting educational attainment (Kohen). For blacks, although parental occupation is not so strong a factor, the size of the family is. Black young men from very large families receive less education, and education in turn affects wages.

Parental socioeconomic status, parental attitudes toward work, parental work experience and education level all affect children's attitudes, education level, and labor force experience. Labor market success is still too closely linked to parental socioeconomic status insofar as schooling is a primary cause of labor market success, and ability and family socioeconomic status are the most important determinants of the amount of schooling a youth receives.

With education attainment the transmission mechanism for inequality in the home, it would appear that compensatory school programs designed to counterbalance disadvantage in the home are necessary. Such special programs should continue to be targeted to the poor in order to override the long-term effects of socioeconomic deprivation on their children. Federal scholarship programs, for example, can provide a means of breaking intergenerational cycles of poverty.

School Completion is a Major Determinant of Labor Market Success

High school dropouts fare less well in the labor market than high school graduates who do not go on to college. Dropouts are more likely to be unemployed immediately after leaving school. In the first 10 months after leaving school, 28 percent of white female dropouts experienced some unemployment whereas only 19 percent of white female high school graduates were unemployed. Comparable figures for black females were 50 percent (dropouts) and 29 percent (graduates) (Mott and Shaw). The earnings advantage of graduation from high school does not appear immediately, however. One year after leaving school, there is little difference between dropouts and graduates. But after 9 years, graduates make $.15-$.45 more per hour than dropouts with the same personal characteristics. After 13 years the advantage increases to $.30-$.60 (King).

Misinformed, tempted by apparently high wages, uninspired by school and prodded by poverty, many students jeopardize their long-term careers by dropping out. NLS research shows that dropouts unquestionably fare less will in the long run than those who stay in school. Graduation does make a difference even where other related factors are controlled. Completing school, moreover, is more important than the type of school program taken while in high school. This would suggest the need for stay-in-school and return-to-school campaigns. Work experience and work study programs should be evaluated in part for their effect on continued education.

Youth with superior information about the labor market are more successful in obtaining better and higher paying jobs (Parnes and Kohen). Too few young people have a broad knowledge of the variety of jobs available in the labor market, however. Only if young people are sophisticated about job alternatives can they really be said to have freedom of occupational choice.

In particular, young women have very inadequate knowledge of career alternatives and unrealistic expectations about their own attachment to the labor force. Both black and white women tend to underestimate the extent to which they will be in the labor force when they are older. In 1968, 29 percent of white girls ages 14-24 expected to be working at age 35, but in the same year 46 percent of the white women ages 30-40 were actually working. For blacks, 59 percent of the girls expected to be working at age 35 while 67 percent of the women actually were working (Sandell and Shapiro, Expectations). Even though women's work expectations have been growing over time, it is likely that many young women still underestimate their future labor force attachment. The unrealistically low expectations lead to underinvestment in training and schooling.

These findings would suggest the need for career education programs early in the education process, with particular emphasis on overcoming sex stereotyping. Career exploration opportunities should be an integral part of high school curricula.

Post-School Training Pays Off

Youth who have participated in formal training programs do better in the labor market than those who do not participate. White young men receive about 7 percent more per hour in wages for each additional year of training, and blacks receive about 14 percent more per hour (Flanagan).

Studies of the effects of training for adults as well as youth show that training has positive effects on earnings regardless of the participant's age (Ashenfelter; Cooley, et al.). The effects of training are not temporary. Six years after participating in manpower programs in Michigan, a sample of participants showed increased earnings, employment, and educational attainment (Borus).

Training can offset the disadvantages of poor and inadequate schooling. Some of the beneficial effects of high school graduation occur simply because high school graduates are more likely to be chosen to receive additional vocational training, which leads in turn to higher wages (King). It appears that the benefits are greatest when training is linked specifically to employment.

For Some Youth the Problem of Unemployment is not Temporary

Over a 10-year period those youth who have repeated spells of unemployment are also unemployed for long periods of time. Of those youth who suffered unemployment in more than 4 of the 10 years, 53 percent of the black young women, 23 percent of the white young women, 47 percent of the white young men, and 59 percent of the black young men were unemployed for 52 weeks or more. The average black young men were unemployed for 52 weeks or more. The average black who suffered 4 or more unemployment spells was unemployed for 60 weeks.

Although unemployment is reduced for most people when they reach 25 to 29 years, a minority continue to suffer from prolonged and repeated unemployment. Although researchers are in the process of identifying the groups with prolonged unemployment, we already know that blacks who drop out of high school are likely to suffer much greater long-term disadvantage than others (King). Those who enroll in training programs, however, have been able to offset much of this disadvantage, indicating that program interventions have been effective (Becker and Hills).

Job Shopping May Be Desirable

In part, high teenage unemployment rates may be due to job shopping. Teenage unemployment rates are considerably higher than rates for adults in their late 20's. The difference is in part due to the short tenure of the jobs held by teenagers and the job changing which occurs (Leighton and Mincer). Many young men with high unemployment and short job tenure appear to be trying out a job and then moving to something different, demonstrating that an appropriate job match is not done without some degree of trial and error.

Some of the most reliable information about the labor market is obtained through experience. One study of the long-run effects of teenage unemployment shows that for white young men labor market prospects can be improved by incurring some degree of unemployment, although this positive influence declines with extended unemployment and is particularly severe for black young men (Becker and Hills). In fact, the patterns of job changing for blacks yield an impression of greater job instability overall (Leighton and Mincer).

In job counseling, teens should not be "locked" into occupations until they have had time to experiment. They should be assisted in keeping options open until they have gained experience. For special groups like blacks and Hispanics, however, unemployment should not be easily dismissed as part of a process of trial and error which always ends favorably. Special programs must continue to be targeted to those groups whose unemployment problems are not merely transitional.

Job Experience Can Be Useful Whether in the Private or Public Sector

Teens are realistic in their job aspirations; they want to work at wage rates that are reasonable. Newly tabulated data from the NLS 1979 survey of youth ages 14-21 show that 40 percent of those who are not working but who would like to work would be willing to take a job at the minimum wage or less. Opportunities for work are not always available for young people; however, public service or subsidized jobs can provide young people with employment and income, but perhaps equally important is the experience gained and the opportunity to explore the world of work. Young people feel these opportunities are denied them. Almost one-half of the young people ages 16-21 from the NLS 1979 survey felt that age discrimination was a problem in getting a good job. One-eighth of those surveyed felt that lack of experience was also a problem. CETA programs are providing opportunities for "experience search" in the labor market, and with good results. For example, in an evaluation of the Vocational Exploration Program, 70 percent of the 3,187 enrollees surveyed agreed that the program helped in deciding on the kind of job one young person would like to have. If jobs programs are to provide opportunities for exploration, however, they must be well administered and provide a variety of learning experiences.

Teenage Pregnancy is an Increasing Serious Problem

Teenage motherhood contributes to labor market difficulties which increase with time. In the U.S. today 16 percent of births are to teenage mothers, compared to 12 percent in 1940.

Some teenage girls recognize that there are not many good jobs available to them, and they also see that the community will consider them adults if they have babies. Although they are right on both counts, pregnancy and childrearing create greater long-term constraints than labor market discrimination.

Among women at age 18, girls who bore a child at age 15 or younger suffer an educational decrement of 1 1/2 years relative to those not having children by this age, and those having a first birth at 16 or 17 experience a loss of 2/3 years. But by age 24 those who become mothers at age 15 or less have completed 2.8 fewer years compared to childless women, while those who become mothers at 16-17 have completed 1.4 fewer years (Moore et al.).

Young women who drop out of school to have children are caught in a double bind of being less likely to have training and more likely to need the increased income that usually comes as a result of training. Since they are less likely to complete school, teenage mothers are also less likely to get jobs at above-average wages. At the same time they are more likely to need them, because child care costs raise the wage at which it is cost-efficient for young mothers to take jobs.

Given the serious consequences and dimensions of this problem, it would seem clear that teenagers need better sex education which should include counseling on the labor market implications of pregnancy. Training programs and day care centers should be made available for teenage mothers.

Inadequate Transportation Is a Serious Barrier to Employment

When a low-income sample of young people was asked about problems in getting good jobs, almost a third of those surveyed answered that lack of transportation was a major problem (1979 NLS). Teenagers characteristically have jobs with irregular hours, and public transport systems are organized to serve adults with regular working hours. Car pooling, CETA jitney buses, expansion of public transit systems, discount cards for public transit, and development of safe bikeways are among the possible solutions to this problem. Federally funded construction of a network of bikeway systems could create public service jobs for youth, providing valuable work experience and promoting energy independence as well.

Discrimination Remains a Major Factor

Discrimination is difficult to measure. Pay discrimination is measured by calculating the percent of the difference in pay (males vs. females, blacks vs. whites) that cannot be accounted for by factors such as education which "legitimately" create pay differences. The range of estimates is large. Studies of sex discrimination using the NLS range from 25 percent - 75 percent. The 75 percent figure is obtained using married women ages 30-44. The only "legitimate" pay differences that are allowed are those due to the differences in amount of post-school work experience that men and women have. Differences in education or occupational choice which result in lower or higher wage rates are included in the 75 percent differences "unexplained" (Mincer and Polachek; Sandell and Shapiro, Theory). The 25 percent figure is obtained by analyzing women ages 19-29 who were working in 1973 and 5 years earlier had stated that they wished to be working outside the home at age 35. These "strongly attached" females were compared with males of the same ages (Shapiro and Carr). For race discrimination, a study of young men from the NLS shows that about 25 percent of the black/white differences can be considered due to discrimination (Flanagan). A summary of other studies on sex and race discrimination shows a range of estimates that are from 45-100 percent for sex discrimination and from 55-65 percent for race discrimination (Oaxaca).

Though researchers may disagree about the exact extent of discrimination there is abundant evidence that significant amounts of it exist. Its roots appear to be deeply embedded in many other social areas besides the labor market--in neighborhoods, churches, and schools. Pervasive and long-standing patterns of discrimination can, however, be eliminated by means of well-designed programs and rigorous enforcement policy. A recent NLS study has documented the steady progress achieved by government antidiscrimination policy in spite of the business cycle changes which occurred in the 1970's (Daymont).

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TOWARDS DEFINING THE UNIVERSE OF NEED FOR YOUTH EMPLOYMENT POLICY

By

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Introduction

The youth population which includes teenagers (persons aged 16-19) and young adults (persons aged 20-24) have high unemployment rates both absolutely and relative to the adult population. Young females in 1977 had an unemployment rate more than 1.7 times the rate of all females and male youth had an unemployment rate more than two times the rate for all males. Put differently, a fourth of the labor force but nearly half of the unemployed were youth. Perhaps the most critical problem underlying youth employment policy is to determine the magnitude of youth employment problems, to identify those which are more serious, and to set priorities for public intervention.

Defining the universe of need is not a strictly objective matter. Value judgments must be made at each step in assessing the relative importance of any given youth labor market experience and in placing priorities on actions that would improve the situation for unsuccessful youth. The youth population is not homogeneous, and there are infinite variations even within subgroups. Problems cannot be defined in status and obsolete terms, but must be examined in light of similar and cyclical trends as well as relative to labor market problems of other groups. In other words, the universe of need is dependent on normative judgments, analytical perspectives, definitional assumptions as well as statistical measurements.

Review of Recent Youth Labor Market Experience

The youth employment problem is longstanding. Over the past twenty years the unemployment rate ranged from 10 to 18 percent for white male teenagers, the group with the best labor market experience among the teenaged groups, to between 25 and 40 percent for non-white females, the group with generally the worst labor market experience (Table 1). The unemployment rates for young adults are significantly better than the unemployment rates for teenagers. Again, the best experiences were those of white males and the worst were those of black females. The youth rate is typically a multiple of the adult unemployment rate. The white teenage males tyically range from two to three times the white adult males and the white young adult male typically ranges between 1½ to 2 times the white adult rate. The black teenage males, however, range from 3 to 4½ times the black adult rates, and the young adult rates for blacks have typically ranged from about 1½ to 2 times the black adult unemployment rate.

The exact relationship between youth unemployment and the cycle depends upon the years over which the relationship is estimated, however all estimates reviewed reveal a high degree of sensitivity between youth unemployment rates and the level of aggregate demand. According to regressions for the 1958-1978 period summarized in table 2, the unemployment rates for youth increase from .9 to 3.2 percentage points for every percentage point increase in the overall unemployment rate.

Table 1

UNEMPLOYMENT RATES FOR YOUTH
1958 to 1978

	Females 20+		Females 16-19		Females 20-24	
Year	White	Nonwhite	White	Nonwhite	White	Nonwhite
1958	5.6	9.5	12.7	28.4	7.4	18.9
1962	4.7	9.6	12.8	30.2	7.7	18.2
1966	3.3	6.6	12.1	31.3	5.3	12.6
1970	4.4	6.9	13.4	34.4	6.9	15.0
1974	5.0	8.4	14.5	34.6	8.2	18.0
1978	5.2	10.6	14.4	38.4	8.3	21.3

	Males 20+		Males 16-19		Males 20-24	
Year	White	Nonwhite	White	Nonwhite	White	Nonwhite
1958	5.5	12.7	15.7	26.8	11.7	19.5
1962	4.0	10.0	13.7	22.0	8.0	14.6
1966	2.2	4.9	10.5	21.3	4.1	7.9
1970	3.2	5.6	13.7	25.0	7.8	12.6
1974	3.5	6.8	13.5	31.6	7.8	15.4
1978	3.7	8.6	13.5	34.4	7.6	20.0

Source: Adult Rates from Economic Report of the President, 1979
Youth Rates from U.S. Dept. of Labor, Draft - Fact Book

Table 2

REGRESSION ESTIMATES OF UNEMPLOYMENT EQUATIONS 1958-1978 ANNUAL AVERAGES

Equation	Constant	b_1	b_2
Females			
White			
16-19	7.812	.918**	.086**
20-24	1.327	.992**	.068**
Nonwhite			
16-19	20.480	1.167	.533**
20-24	3.960	2.169**	.118**
Males			
White			
16-19	5.285	1.660**	-.057*
20-24	-1.608	1.812**	-.050*
Nonwhite			
16-19	8.682	2.501**	.432**
20-24	-4.176	2.208**	.882

Equation Formula:

$$U_{ij} = a_0 + b_1 U_{i,} 16 + +b_2 t + e_i$$

.05*
.01**

There is evidence of a secular deterioration in the unemployment of subgroups of youth, but not for all youths. For 1958-1978 period, the trend coefficients were insignificant for white male and white female youth. On the other hand, the time trend is fairly large and significant for all non-white teenagers. The trend coefficient for non-white male young adults was large but insignificant and the coefficient for non-white female adults was moderate and significant.

The evidence from unemployment statistics alone is of limited value because the unemployment rates confound the effects of labor force participation and unemployment. This problem is especially serious in interpreting teenage unemployment statistics. The employment population ratio (E/P) provides a supplementary indicator of youth labor market experiences. The data for this statistic is shown in table 3.

These statistics provide a different and more optimistic picture of the labor market situation for white youth. As can be seen, the E/P increased rather significantly for all white female youth cohorts. The increases were from 35.0 percent in 1958 to 48.7 in 1978 for females 16-19, while the increase for white females 20-24 was from 42.6 percent in 1958 to 60.6 percent by 1978. For white males the teenagers also experienced an increase over the period (from 47.6 to 56.3) whereas the E/P remained about constant for white males 20-24 (76.6-76.0).

On the other hand the E/P's for both non-white male teenagers and young adults decreased significantly over this twenty year period, while the E/P's for nonwhite female youth were stagnant. Thus all non-white cohorts experienced a significant decline in their E/P ratios relative to corresponding white cohorts. This is shown in table 4 for selected years.

Moreover, as can be seen from the data in table 5, the E/P's for white youth in general have not declined relative to the E/P's for the white population as a whole and have generally increased for most white youth cohorts.

Again, the picture is different for non-white youth. All of the E/P's for non-white youth except the E/P for females 20-24 have declined relative to the E/P of the general population since 1958, and all of the non-white group including females 20-24 have had sharp declines in their relative E/P's since 1969.

The employment situation for youth is also influenced by their school enrollment status. Since 1950 the school enrollment rates for all cohorts have increased significantly. The enrollment rates for black youth have increased more repidly than the enrollment rates for white youth. As a consequence, although all black youth cohorts had lower enrollment rates than whites in the 1950's, by 1977 some of the younger cohorts, particularly males, are enrolled at higher rates than whites, while the others have almost reached parity in enrollment. (Table 6)

Table 3

EMPLOYMENT POPULATION RATIOS
1958 to 1978

	Females		Females 16-19		Females 20-24	
Year	White	Nonwhite	White	Nonwhite	White	Nonwhite
1958	33.6	42.8	35.0	22.8	42.6	39.0
1962	34.7	42.7	34.8	23.1	43.5	39.8
1966	37.5	45.0	37.5	23.1	48.3	47.6
1970	40.3	44.9	39.5	22.4	53.7	49.0
1974	42.4	43.8	44.3	22.3	58.6	47.7
1978	N/A	N/A	48.7	23.5	60.6	45.4

	Males 16+		Males 16-19		Males 20-24	
Year	White	Nonwhite	White	Nonwhite	White	Nonwhite
1958	79.1	72.4	47.6	42.0	76.6	71.4
1962	78.3	72.0	46.4	41.7	79.6	76.3
1966	78.3	74.0	50.1	40.5	81.0	82.8
1970	76.8	70.9	49.6	35.5	76.8	73.0
1974	76.0	66.2	54.4	32.3	79.8	69.4
1978	N/A	N/A	56.3	29.8	76.0	61.1

Source: Adult Rates from Economic Report of the President, 1979
Youth Rates from U.S. Dept. of Labor, Draft - Fact Book

Table 4

EMPLOYMENT POPULATION RATIONS FOR NONWHITE YOUTH RELATIVE TO WHITE YOUTH
Selected Years 1959-1977 by Sex & Age

	Males		Females	
Year	16-19	20-24	16-19	20-24
1959	86.1	97.9	58.3	100.5
1964	84.0	98.5	67.7	98.5
1969	76.3	98.2	63.5	96.6
1974	59.4	87.0	50.3	81.4
1977	50.3	77.8	43.9	73.9

Based on Table 3

Table 5

EMPLOYMENT POPULATION RATIOS FOR YOUTH RELATIVE TO ENTIRE POPULATION FOR Selected Years 1959-1977 by Race, Sex, & Age

	FEMALES				MALES			
Year	Nonwhite		White		Nonwhite		White	
	16-19	20-24	16-19	20-24	16-19	20-24	16-19	20-24
1959	47.0	96.3	102.1	121.4	56.1	102.8	60.2	101.1
1964	50.2	100.7	91.0	128.0	51.9	107.1	57.8	101.9
1969	54.7	112.2	98.6	133.3	53.6	106.2	65.3	100.6
1974	50.9	108.9	104.5	138.2	48.8	104.8	71.6	105.0
1977	46.2	103.7	103.1	137.4	44.1	98.4	73.5	106.1

Based on Table 3

Table 6

SCHOOL ENROLLMENT RATES
1950 and 1977 by Location, Sex, Race & Age

	White Males				Nonwhite Males			
Year	16-17	18-19	20-21	22-24	16-17	18-19	20-21	22-24
1950								
Urban	82	46	29	23	72	32	16	14
Rural-Non Farm	74	33	14	11	58	23	10	9
Farm	65	24	6.5	6	52	22	7.8	6
1977								
Large SMSA	91	54	43	24	93	61	42	20
Rural-Non Farm	88	45	30	16	94	48	27	11
Farm	91	37	17	14	84	--	16	--
	White Females				Nonwhite Females			
1950								
Urban	78	33	14	5	67	25	11	5
Rural-Non Farm	73	23	7	3	N/A	22	9	4
Farm	75	27	5	3	63	29	10	3
1977								
Large SMSA	89	51	37	16	92	50	34	19
Non Farm	89	40	27	12	85	50	31	11
Farm	85	63	35	1	88	61	11	2

Source: U.S. Dept. of Labor

As would be expected, E/P's are higher for out-of-school than they are for in-school youth. Table 7. Somewhat surprising, however, is the fact that the unemployment rates of out-of-school youth are consistently higher than the rates of in-school youth. This may be due in part to the greater labor force attachment of out-of-school youth. The patterns are for the most part consistent with the trends observed without taking account of enrollment patterns, except that the trends revealed by this data for out-of-school white male youth aged 16-17 is contrary to the general trend for white youth. This cohort shows a marked deterioration in both its E/P's and unemployment rates since 1964. The E/P's for all in-school white female cohorts improved during the period covered by the data, while the unemployment rates showed no clear secular trend. Both the E/P's and the unemployment rates for all non-white male cohorts deteriorated, while the E/P's and unemployment rates for non-white enrolled female cohorts showed no clear trend. The E/P's for non-enrolled female teenagers declined, and the unemployment rates for non-white female non-enrolled youth increased.

The educational attainment of both black and white youth has increased over the past couple of decades; however, the black educational attainment has increased at a much faster pace. As a consequence, the median educational attainment of all non-whites in the labor force has increased from 8.4 to 12.2 years between 1957 and 1977, compared to an increase from 12.1 to 12.6 for whites. Thus the gap of 3.7 years in the median educational attainment which existed in 1957 had declined to only .4 years by 1977. Since these figures are for the population as a whole, it is clear that the gap between youth cohorts must have narrowed even more.

The more educated cohorts have both higher employment/population ratios and lower unemployment rates. Table 8. At each educational level, non-enrolled black youth are more likely to be unemployed and less likely to be employed than whites. The absolute racial disparities are lowest among the most highly educated youth. However, black college graduates have almost the same employment rate as white high school dropouts.

During the past several decades both the non-white and the white population have become more urbanized. Table 9. Nearly two-thirds of the white youth population and three-fourths of the black youth population was relatively more concentrated in poverty areas (48% vs. 14% for white youth) and more concentrated in central cities (54% vs. 22% for white youth).

No matter where they live, there are large differences between both the E/P's and the unemployment rates of blacks and whites. Table 10. In all areas there is more than a 20 percentage point difference in the employment/population ratios in favor of whites. The biggest disadvantages, surprisingly, are found in metropolitan non-poverty areas. Similarly there are large differences in the unemployment rates of whites and blacks.

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Table 7

Employment Population Ratios and Unemployment Rates for 1964 - 1978
Enrolled Females

	White						Nonwhite					
	16-17		18-19		20-24		16-17		18-19		20-24	
	E/P	U.R.	E/P	U.R.	E/P	U.R.	E/P	U.R.	E/P	U.R.	E/P	U.R.
1964	20.5	12.7	22.7	11.6	35.2	6.5	10.9	36.1	20.5	3.8	30.3	23.0
1966	26.6	7.2	30.9	7.5	37.4	3.5	11.7	28.1	24.5	27.7	41.3	-
1968	26.9	9.5	29.2	8.7	40.8	5.1	14.5	27.4	24.5	24.2	44.2	8.6
1970	30.3	14.8	34.9	11.5	32.0	7.3	14.6	28.4	17.4	35.2	35.4	9.0
1972	31.1	14.5	35.8	12.9	48.1	6.6	10.5	40.2	10.7	40.0	31.5	15.0
1974	35.9	15.8	34.4	12.4	53.7	6.2	9.7	48.0	19.6	32.9	38.9	20.6
1976	35.2	15.5	41.4	11.2	53.1	5.7	8.5	40.0	18.2	33.3	31.4	23.1
1978	40.9	13.3	43.2	9.8	57.0	5.5	13.5	41.3	19.8	38.5	36.0	18.3

Employment Population Ratios and Unemployment Rates for 1954 - 1978
Not Enrolled Females

	White						Nonwhite					
	16-17		18-19		20-24		16-17		18-19		20-24	
	E/P	U.R.	E/P	U.R.	E/P	U.R.	E/P	U.R.	E/P	U.R.	E/P	U.R.
1964	30.7	24.3	51.9	13.3	47.3	6.9	35.9	33.3	45.1	28.7	50.2	15.0
1966	34.9	21.5	56.9	10.8	50.0	5.8	19.5	54.6	42.1	25.6	47.9	15.2
1968	32.1	22.1	56.7	11.0	53.0	6.3	14.5	50.0	43.1	25.8	54.0	12.2
1970	32.1	26.1	56.1	13.6	55.7	7.1	14.9	50.0	35.8	35.9	51.8	14.7
1972	38.3	22.8	58.9	12.0	57.4	8.4	11.3	58.8	35.0	37.5	49.7	20.5
1974	44.8	22.8	60.5	14.9	61.0	7.5	18.4	43.8	38.4	32.9	51.8	19.3
1976	33.8	32.2	60.7	16.3	61.5	11.6	3.9	85.8	36.8	35.1	47.9	22.1
1978	47.9	24.3	64.8	12.7	67.8	7.1	14.8	50.0	35.0	39.2	52.3	21.6

Employment Population Ratios and Unemployment Rates for 1964 - 1978
Enrolled Males

	White						Nonwhite					
	16-17		18-19		20-24		16-17		18-19		20-24	
	E/P	U.R.	E/P	U.R.	E/P	U.R.	E/P	U.R.	E/P	U.R.	E/P	U.R.
1964	29.7	9.4	33.0	7.6	44.8	5.4	25.6	15.6	32.5	16.3	49.3	21.4
1966	36.7	8.0	35.7	8.4	45.1	3.1	22.9	20.7	24.0	14.1	45.9	4.8
1968	36.9	10.1	40.0	8.4	49.6	4.5	19.5	30.0	31.7	15.3	38.0	4.1
1970	34.9	15.0	36.5	13.8	47.4	8.9	16.0	15.3	21.3	32.2	36.9	10.6
1972	37.5	13.8	42.6	9.5	49.2	7.6	11.5	39.8	24.1	29.3	48.5	8.8
1974	39.8	14.2	42.1	8.6	51.7	8.2	19.0	29.3	24.1	30.6	43.2	14.7
1976	38.1	17.9	41.1	12.4	51.6	8.8	13.8	38.9	24.8	29.7	42.9	12.3
1978	43.0	15.3	45.2	11.9	54.7	5.3	15.6	35.0	21.7	33.3	N/A	N/A

Employment Population Ratios and Unemployment Rates for 1964 - 1978
Not Enrolled Males

	White						Nonwhite					
	16-17		18-19		20-24		16-17		18-19		20-24	
	E/P	U.R.	E/P	U.R.	E/P	U.R.	E/P	U.R.	E/P	U.R.	E/P	U.R.
1964	65.6	12.5	80.9	12.3	90.0	7.1	43.8	28.2	73.4	18.7	86.7	8.1
1966	62.0	18.8	82.1	7.9	95.2	2.9	45.8	22.9	75.4	11.2	90.4	5.8
1968	65.7	11.7	81.3	7.6	90.8	3.7	59.2	25.8	69.4	20.0	84.8	9.3
1970	57.9	27.5	77.7	12.6	81.2	8.5	40.5	33.3	58.1	23.2	77.1	14.8
1972	59.7	21.6	81.7	10.4	88.0	7.8	48.4	32.6	63.6	21.4	81.3	10.2
1974	63.7	19.5	78.3	13.2	89.3	6.9	42.1	40.0	60.8	30.3	78.2	14.7
1976	54.6	28.5	77.8	14.4	86.3	9.7	42.9	27.0	42.8	43.1	66.8	20.8
1978	52.1	29.0	78.5	11.9	89.8	6.1	28.6	42.9	50.8	25.5	72.5	18.5

Table 8

1977

EDUCATION AND EMPLOYMENT FOR OUT OF SCHOOL YOUTH

Years of School Completed	Percent Distribution of Pop.		Unemployment Rates		Employment/Prop. Ratios	
	White	Black	White	Black	White	Black
8 or Less	4.01	4.28	17.1	24.7	51.19	33.15
8-11	15.11	25.18	16.3	30.6	59.20	44.19
H. S.	56.62	51.74	7.0	21.9	79.79	61.15
1-3 Yrs. College	15.92	14.04	4.5	16.5	84.32	70.03
4+	8.31	4.91	5.7	15.1	90.54	84.04
Total	100	100	8.3	23.1	76.02	56.08

Source: U.S. Dept. of Labor, Draft - Fact Book

Table 9

DISTRIBUTION OF POPULATION, EMPLOYMENT AND UNEMPLOYMENT OF TEENAGERS BY RACE AND LOCATION, SECOND QUARTER 1977

	Population		Employed		Unemployed	
	White	Black	White	Black	White	Black
Location						
Central City:						
Poverty Area	2.5	26.3	1.7	18.8[a]	2.5	27.1
Non Poverty Area	19.7	27.8	19.0	26.6	20.7	33.9
Suburbs:						
Poverty Area	1.6	5.0	1.4	4.4	1.6	6.7
Non Poverty Area	41.7	15.8	44.0	19.2	40.5	13.7
Non Metropolitan Areas:						
Poverty Area	10.3	17.1	9.4	19.9	9.7	11.3
Non Poverty Area	24.0	7.9	24.5	11.1	25.0	7.3
Total Pop. (000)	13,983	2,493	7,097	548	1,360	372

[a] This number may be read as follows: In 1977 18.8% of employed black teenagers lived in central city poverty areas.

Source: Employment and Training Report of the President, 1978; Page 73, Table 3.

Table 10

EMPLOYMENT POPULATION RATIOS AND UNEMPLOYMENT RATES BY RACE AND LOCATION

	1 E/P Whites	2 E/P Blacks	3 1-2	4 U/R Whites	5 U/R Blacks	6 5-4
Central City Poverty	36	16	20	22	50	28
Central City Non Pov.	50	21	29	17	46	29
Suburb Poverty	43	19	24	18	51	33
Suburb Non Poverty	53	27	26	15	33	18
Non Metro. Poverty	46	26	20	17	28	11
Non Metro. Non. Pov.	52	31	21	16	31	15
All Areas	51	22	29	16	41	25

Source: Employment and Training Report of The President, 1978; Page 73 Table 3.

Employment problems are more frequent for youth from low income families. The proportion of youth from families with income less than 70% of the Bureau of Labor Statistics Lower Living Standard ranges from 15.4 percent for white males 20-21 to 7.65 percent for black females aged 16-17. Table 11. There are huge differences between the proportions of white and black youth who are disadvantaged. Female youth of both races are more likely to be disadvantaged than are male youth.

Disadvantaged youth have lower employment and higher unemployment than advantaged youth of the same race, sex, and age group. Table 12. Nonwhite disadvantaged do worse relative to non-white advantaged youth than white disadvantaged do relative to white advantaged youth in gaining employment. For non-white 16-17 year olds, especially males, being disadvantaged does not have very strong effect on relative status.

Non-white youth do much worse than white youth, both in terms of gaining employment and in terms of unemployment in most age/sex groups regardless of income status. Table 13. The exception is non-disadvantaged, non-white females aged 22-24, who do better than their white counterparts both in terms of E/P's and unemployment rates. In general the relative disparity between non-white and white youth declines with age for both E/P's and unemployment. However, the unemployment disparity increases for disadvantaged non-white females until age 22-24. For teenagers 16-17, the relative disparity is less for disadvantaged than for advantaged youngsters for both E/P's and unemployment. For male youth 18-25 the relative disparity for advantaged youth in terms of E/P's is lower than it is for disadvantaged youth, whereas the opposite is true for unemployment.

Summary of Evidence

The evidence suggests that there has been no general deterioration in the position of youth in the labor market over the past 30 years. Employment/population ratios have generally increased or remained constant for all white cohorts. This indicates that the secular employment situation for both in-school and out-of-school white youth has improved. Only in the case of nonwhite teenagers is there a consistent indications of secular deterioration. The employment population ratios of youth cohorts relative to adult cohorts of the same race, we found that the white youth situation has improved for all cohorts since 1959 relative to the white adult population. The situation for blacks again differs; the E/P's of black cohorts have either remained constant or deteriorated. This indicates that the employment position of white youth actually improved relative to adults despite increasing proportions of youth in the labor market.

Table 11

DISTRIBUTION OF YOUTH POPULATION BY FAMILY INCOME STATUS, AGE, RACE AND SEX, IN 1977

	Distribution of Total Population	Proportion Disadvantaged	Proportion Non Disadvantaged
White Males			
16-17	22.9	22.7	81.3
18-19	22.9	17.0	83.0
20-21	22.7	15.4	84.6
22-24	31.4	16.9	83.1
Total	100.0	17.9	82.0
Non White Males			
16-17	27.9	68.5	31.5
18-19	22.6	68.1	31.9
20-21	21.0	51.0	49.0
22-24	28.3	44.2	55.8
Total	100.0	57.7	42.1
White Females			
16-17	21.6	25.0	75.0
18-19	22.8	22.8	77.2
20-21	23.3	24.5	75.5
22-24	32.2	22.0	78.0
Total	100.0	23.4	76.5
Non White Females			
16-17	23.8	76.5	23.5
18-19	23.2	70.3	29.7
20-21	20.8	70.1	29.9
22-24	32.1	62.3	37.7
Total	100.0	69.2	29.9

Source: U.S. Dept. of Labor, Draft - Fact Book

Table 12

RELATIVE EMPLOYMENT STATUS OF DISADVANTAGED YOUTH BY AGE, RACE AND SEX, 1977

	$\frac{\text{Disadvantaged E/P}}{\text{Non Disadvantaged E/P}}$	$\frac{\text{Disadvantaged Unemployment Rate}}{\text{Non Disadvantaged Unempl. Rate}}$
White Males		
16-17	63.6[a]	198.1[a]
18-19	90.3	243.4
20-21	81.9	239.3
22-24	76.2	297.2
Nonwhite Males		
16-17	100.0	128.4
18-19	76.2	132.8
20-21	65.2	158.4
22-24	62.0	266.0
White Females		
16-17	53.6	173.1
18-19	69.0	283.3
20-21	59.7	272.8
22-24	45.3	378.9
Nonwhite Females		
16-17	73.3	83.2
18-19	35.0	174.4
20-21	33.3	457.8
22-24	35.7	942.5

[a] These numbers may be read as follows: In 1977 disadvantaged white males 16-17 were employed 63.6% as often as non disadvantaged white males and unemployed 198.1% as often.

Source: U.S. Dept. of Labor, Draft - Fact Book

Nonetheless, the fact remains that high levels of youth unemployment have been with us throughout the last three decades. The data reveal that at any given times there are literally millions of youth who are actively seeking work and cannot find it. Whether or not this general fact poses a problem that we should be concerned about depends on the causes and consequences of the generally high levels of youth unemployment.

Moreover, there is a clear indication that black youth are experiencing increasing difficulties in the labor market. There is a clear secular deterioration of crisis dimensions for black youth even if there is no similar crisis for white youth. Moreover as we have seen, the racial disparity for black youth exists across all education, income, location, age and sex categories.

Besides race, there are other serious dimensions of the youth unemployment problem. In general, youth living in metropolitan poverty areas have greater labor market difficulties than youth living elsewhere. Youth from low-income families have significantly greater labor market difficulties than non-disadvantaged youth. Finally the evidence suggests that enrolled youth may have less serious labor market difficulties than nonenrolled youth. Moreover the trends for non-enrolled 16-17 year old males of both races suggest strongly that high school dropouts may be experiencing increasingly severe labor market problems. The evidence was also clear that youth with more education experienced greater labor market success than youth with less education.

In sum, the evidence indicates that there are four aspects of youth labor market experiences that may be cause for concern: First, the youth unemployment rate is always high relative to the overall unemployment rate. Second, youth unemployment rates are especially sensitive to the ups and downs of the business cycle so that in periods of generally high unemployment, youth unemployment will be at exceptionally high levels. Third, there is a marked racial differential in the labor market experiences of youth which is getting progressively worse. The employment and unemployment rates of black youth are at crisis levels. Fourth, there is some indication tht labor market difficulties are concentrated among youngsters of both races who are disadvantaged--locationally, educationally, or by family income.

The Dimensions of the Youth Employment Problem

The universe of need is defined in terms of range of employment gaps for the year 1977 -- an overall gap corresponding to the general unemployment problem, a cyclical gap corresponding to the problem of youth cyclical sensitivity, an adult gap corresponding to the youth-adult differential, and a racial gap corresponding to the youth racial differential. Estimates of the numbers of youth disadvantaged by location, education and family income status are included in the estimates of the other three gaps.

They provide perhaps maximum estimates of need. The universe of need can only be determined after judgments are made concerning the seriousness of the various differentials and the priorities that should be attached to eliminating them. The estimates are all rough in the sense that they take no account of induced changes in youth participation rates as more jobs are provided.

Finally, even though defined as job gaps, the needs might be accommodated through the paid training programs, public service jobs, a national youth service corps, increased military service or other options.

All of the gaps are estimated as the difference between employment or unemployment in 1977 and that required to achieve some target level of employment or unemployment. The first gap estimate is the zero unemployment job gap. This is simply an estimate of the number of jobs that would have been required to reduce the youth unemployment rate to zero in 1977. While it is unlikely that anyone would seriously advocate a goal of zero unemployment in view of the requirements of jobs search, it does provide a maximum estimate of the severity of the problem. The minimum job gap for youth by this measure would be about 3.2 million jobs. Table 14. This estimate is a minimum because it does not take account of induced changes in youth participation rates. This assumption is especially likely to lead to underestimates for nonwhite youth. Later on we will make a separate estimate of the racial job gap.

A less extreme goal for youth employment policy might be to reduce youth unemployment to the frictional level. While there is no general agreement concerning the frictional or full employment level, the best year that we have had in the post World War II period was 1969. Using the employment levels in 1969 to approximate the maximum employment level that our economy will attain over the business cycle, the cyclical unemployment gap is defined as the difference between 1969 and current levels of unemployment. Some would argue that the minimum unemployment rate has drifted upwards in the past few years. To the extent that this is so, this estimate of the cyclical gap is a maximum estimate of the cyclical gap. Note, however, that the minimum non-inflationary level of unemployment and the frictional level of unemployment are not generally equal. In fact the frictional level is probably much lower than the non-inflationary level and thus our estimate is a minimum estimate of the excess of current unemployment over the frictional level. In order to reduce the youth rate in 1977 to the 1969 rate, a total of 1,297,000 jobs would have been required. Table 15.

Youth generally have much higher levels of unemployment than adults. If youth and adults had the same chance of being employed given active participation in the labor force then both of their unemployment rates would equal the overall unemployment rate. This suggests that the youth adult differential can be estimated as the increase in employment that would give youth the same rate as the population as a whole. It is to be expected that youth would generally have a greater unemployment rate than adults. Consequently few would probably support a policy goal of

TABLE 14

THE ZERO UNEMPLOYMENT JOB GAP [1]

Age	Total	White Males	Non White Males	White Females	Non White Females
16+	844	2828	747	2532	737
16-17	770	338	77	289	66
18-19	874	330	118	319	107
20-24	1583	646	203	528	206
Total Youth	3227	1314	398	1136	379

TABLE 15

CYCLICAL JOB GAP[1]
(JOBS REQUIRED TO ACHIEVE 1969 UNEMPLOYMENT RATES)

	Total	Non-White Females	White Females	Non-White Males	White Males
16+	3,371	326	1,075	428	1,542
16-17	216	20	70	28	98
18-19	314	34	94	56	130
20-24	767	101	216	124	326
Total Youth	1,297	155	380	208	554

reducing the youth rate to the adult level. This calculation therefore again provides a maximum estimate of the need for jobs to deal with the youth adult differential. To achieve a total elimination of the youth-adult unemployment differential in 1977 would have required a minimum of 1,540,000 jobs. Table 16. It is interesting to note that this calculation indicates that the youth-adult differential has a greater impact on youth than cyclical factors.

To eliminate the differentials in the labor market experiences of white and non-white youth, non-white youth would had to have the same employment/population ratio as white youth of the same age/sex cohort.

The number of jobs required to eliminate the racial differential in youth unemployment is 1,136,000 jobs. Table 17. It should be noted that the estimated number of jobs required to eliminate the racial job differential is more than that required to reduce the black youth unemployment rate to zero at current participation rates. This is because of the assumption that black youth participation rates would increase to the level of white youth participation rates if enough jobs were available.

In general the number of jobs required to eliminate both the youth-adult differential gap and cyclical unemployment gap is less than the sum of the two gaps. For example, the sum of the two gaps for white females is 822 thousand jobs; but the number of jobs required to eliminate both gaps is only 736 thousand. For non-white youth eliminating the racial job gap would eliminate part of their cyclical and adult gaps. Consequently, the total need to eliminate the non-white unemployment problem is substantially less than the three gaps. The total job gap assuming youth are given the same rates as the general population would experience at the cyclical maximum and that racial differentials are eliminated for non-white youth is 3,197,000. Table 18.

Under assumption that the cyclical and adult-youth differentials are distributed the same way as the zero unemployment job gap, and that the job deficits for all youth are distributed the same way as the deficits for teenagers, it would take about 400 thousand jobs to eliminate the cyclical job gap in central cities, 484 thousand to eliminate the adult-youth differential and 694 throusand to eliminate the racial job differential. Table 19. The total jobs required to eliminate the total youth employment gap in the central cities would be 1,217,000. This would be divided 379 thousand in poverty areas and 838 thousand in non-poverty areas. Non-whites living in central cities have a need for 808 thousand jobs--335 thousand in poverty areas.

All of these jobs would not be full-time. Three-fourths of female 16-17 year olds and 22 percent 18-24 year olds worked part time voluntarily in 1977. The corresponding figures for males were 67 and 14 percent respectively. Applying these proportions to the estimated adult-youth differential job gap, for example, implies that 535 thousand or 35 percent of the 1,540,000 jobs would have to be part time. Table 20.

TABLE 16

ADULT JOB GAP
(JOBS NEEDED TO ELIMINATE YOUTH/ADULT UNEMPLOYMENT DIFFERENTIAL)

	Total	White Males	Non-White Males	White Females	Non-White Females
16-17	502	232	52	173	45
18-19	489	191	77	155	66
20-24	549	264	87	114	84
Total	1540	687	216	442	195

TABLE 17

RACIAL GAP
(JOBS NEEDED TO ELIMINATE THE RACIAL DIFFERENCES)

	Total	Non-White Males	Non-White Females
16+	1706	1019	687
16-19	594	359	235
20-24	542	209	333
Total Youth	1136	568	568

TABLE 18

TOTAL YOUTH JOB GAP

		Females		Males	
	Total	Nonwhite	White	Nonwhite	White
16-19	1766	303	446	460	557
20-24	1431	389	290	280	472
	3197	692	736	740	1029

TABLE 19

DISTRIBUTION OF JOB GAPS BY LOCATION

	Central City			Suburbs			Non Metro			All Areas		
	Total	Poverty	Non Pov.	Total	Poverty	Non Pov.	Total	Poverty	Non Pov.	Total	Poverty	Non Pov.
All Youth												
Zero	1043	278	770	1190	92	1098	993	326	667	3226	696	2535
Cyclical	439	122	316	--	39	428	390	132	259	1296	656	1003
Adult	513	140	373	559	46	513	467	156	311	562	342	1197
Racial	627	254	373	261	58	203	248	168	80	1136	480	656
Total Youth	1217	379	838	1065	106	958	914	372	541	3196	857	2337
Whites												
Zero	568	61	507	1031	39	992	848	238	610	2447	338	2109
Cyclical	217	23	193	393	15	378	323	91	233	933	492	804
Adult	262	28	234	475	18	457	391	110	281	151	156	972
Total Youth	409	44	365	743	28	715	611	171	439	1763	243	1519
Nonwhites												
Zero	475	217	263	159	53	106	145	88	57	779	358	426
Cyclical	222	99	123	74	24	50	67	41	26	363	164	199
Adult	251	112	139	84	28	56	76	46	30	411	186	225
Racial	627	254	373	261	58	203	248	168	80	1136	480	656
Total Youth	808	335	473	322	78	243	303	201	102	1433	614	818

Note: Totals may not sum due to rounding.

Table 20

DISTRIBUTION OF JOB GAPS BY PART-TIME AND FULL-TIME STATUS

	Total	Full-Time	Part-Time
Zero Unemployment	3227	2106	1121
Cyclical	1297	846	451
Adult	1540	1005	535
Racial	1136	741	395
Total	3197	2086	1111

The Causes of Youth Labor Market Difficulties

In order to place the various job gap estimates in proper perspective and to move towards a better understanding of the need for public programs, it is necessary to better understand the causes of high youth unemployment. These causes can be sought in three places. First, high absolute and relative youth unemployment may be caused by a failure of the labor market to function effectively in matching available supplies of youth to available demands for youth. Second, high youth unemployment may be caused by characteristics of youth supply, either pathological or non-pathological. Third, high youth unemployment may be caused by a general lack of demand for young workers.

1. Labor Market Malfunctioning

There is very little evidence that the high relative youth unemployment is due to a malfunctioning labor market. By and large, most white youth appear to find jobs when they are available. Now it is true that white youth with lower education and from lower income families have higher unemployment rates than others. However, this does not imply that the labor market is malfunctioning, in the sense of failing to match the best qualified people to the available jobs in a reasonable period of time. The higher youth unemployment rates relative to adult rates appear to be due primarily to the youths' stage of life (see Kalachek and Ehrenberg). Because of their stage of life, youth will in general make up higher proportions of the unemployed pools than they do of the labor force because of their higher probability of being a new entrant or a re-entrant. Youth also have somewhat higher turnover rates, again due largely to their stage of life. Because of their generally higher presence in the job seeker pools youth would have significantly higher unemployment rates than adults even if they had the same rate of success at finding a job. Moreover, youth also appear to have marginally lower rates of success at finding jobs (see Marston). However, this also appears to be largely due to their lack of maturity and experience which places them in a less preferred category especially during periods of a labor market slack. Thus, higher overall rates of youth unemployment and lower rates of youth job-finding success are consistent with a properly functioning labor market, especially in periods of slack demand.

This is not intended to imply that labor markets function effectively for particular groups of "disadvantaged youngsters". However, the problems thak these youngsters face probably have very little to do with a defective labor market mechanism. Rather it is caused by the labor market selecting against youngsters with disadvantaged characteristics as part of the normal process of allocating any given number of jobs.

It does appear that the labor market increasingly is malfunctioning for young blacks. As we have seen, young blacks have higher relative unemployment rates and lower E/P ratios across all education, income, location, age and sex groupings.

Moreover, in each instance the situation has deteriorated absolutely and relatively over the past 30 years with an acceleration in the deterioration of the labor market position in the 1970's. Almost all of the research suggests that the major explanation for the greater unemployment of young black workers is their greater difficulty at finding jobs. (See Ehrenberg, Osterman and Marston.) Blacks with the same measured characteristics as whites are experiencing greater problems landing jobs. This implies that there is an increasing problem with the way the labor market treats young black workers. There is limited evidence that blacks have less labor market information than whites (See Andrisani). However, much of the other evidence we have concerning job search, from local labor market studies and national surveys, suggests that there are not major differences in the job search behavior of blacks and whites. There is little specific understanding to why the labor market functions less effectively for non-whites. The general conclusion is that racism and discrimination plays an important role in limiting the opportunities of non-whites.

Thus the conclusion is that labor markets function relatively effectively for youth except for the inability of the market to allocate opportunities in a non-discriminatory manner.

2. Characteristics of the Supply of Youth

Since there is no trend to explain for youth in general except for a slight improvement in their employment population proportions, what will concern us here is why youth always have relatively high unemployment rates. Certainly these constant high levels of unemployment cannot be explained by relative educational levels since youth generally have higher educational levels than adults and the relative educational levels have been increasing. The one thing that distinguishes youth from adults is that they are younger and at a different stage in the life cycle. Thus in general youth would have less work experience and less maturity. They are also more likely to be new entrants. These non-pathological characteristics of youth appear to account for most of the youth adult differential. The characteristics of youth associated with their higher rates of enrollment in school, e.g. greater need for part-time work, seasonal entry and exit, etc., do not appear to be responsible for higher unemployment rates, since in-school youth generally have lower unemployment rates than out-of-school youth.

There is no evidence that pathological deficiencies in the supply characteristics of youth play a major role in explaining their labor market situation. In general youth are better educated today and at least for white youth, larger proportions are working and thus they have more work experience, and there is no evidence of a general deterioration in the work attitudes of youth relative to adults.

Moreover these statements are also applicable to black youth. Black youth today are clearly more educated than previous cohorts and have also been gaining in educational attainment relative to whites. Thus the aggregate trends in the racial disparity cannot be explained in these terms. Moreover, little of the current differential in black employment experience can be explained by differences in education. The 1977 black youth unemployment rate would be reduced from 23.1 percent to 21.9 percent--about 8 percent of the gap -- if blacks had the same educational attainment distribution as white youth. The estimated increase in the white unemployment rate if they had the non-white distribution of education would be from 8.3 to 9.4 percent, again implying a 7 percent reduction in the racial gap. A similar calculation indicates that between 7 and 24 percent of the differential in the youth employment to population ratio could be explained by the non-white educational distribution. Similar calcuations by others have also indicated that other factors such as geographical location also cannot explain much of the racial differential, and multivariate analysis, even when it includes variables much as family background and marital status, cannot explain more than 50 eprcent of the racial job gap.

Thus, in general the pathological characteristics of youth labor supply cannot explain either the high aggregate level relative to adults or the major part of the trend in racial disadvantage. The non-pathological characteristics of youth related to their age and stage of life probably explains the major portion of their higher unemployment rates relative to adults.

The evidence is clear that the majority of white youth who desire jobs ultimately find them. Moreover, the unemployment rates decline sharply with age, suggesting that the youth unemployment experience is a stage of life experience. Of course this does not mean that some youth do not have long term disadvantages in making labor market connections that may result from personal deficiencies. However this does not account for the bulk of the youth-adult disparity.

It is possible, and some researchers have recently suggested, that a disproportionate share of unemployment may be concentrated among a small group of disadvantaged youngsters. Clearly personal characteristics do play a part in determining the relative probabilities of different youth gaining employment. Thus, supply characteristics may cause particular youth to have long term labor market difficulties even though it does not determine the level of unemployment for youth as a whole.

3. The Role of Demand for Labor

Finally, we should consider the possibility that demand is responsible for high youth unemployment. One possibility is that the structure of demand is responsible for relatively high youth unemployment rates. It is hard to make much sense out of this argument. It is clear that at any given level of aggregate demand the specific probability of a youth finding a job will be determined. However it is difficult to see how the structure of demand could prevent the hiring of youth if the aggregate level of demand increased. Surely there is no evidence that there are rigid proportions between the employment of youths and adults. As a matter of fact the evidence cited earlier and evidence cited by Kalacheck shows clearly that the employment of youth by and large fluctuates with their available supply. One might suspect rigidities caused by school attendance to limit the demand for enrolled youth. However, both the E/P rates and the unemployment rates of enrolled youth are generally better than those for non-enrolled youth.

Finally there is very little evidence that the structure of demand is responsible for the racial differential. Sometimes arguments are made that the skill requirements of jobs are increasing faster than the skills of non-white youth, thus eliminating entry level jobs. However, there is no convincing evidence on this score. Kalachek states, "A summary of the technical literature provides not an iota of support for this contention." As a matter of fact, one could provide a credible argument that the skill requirements of jobs have not increased and may in fact have decreased. The growing literature on worker alienation suggests that jobs have been simplified to far below the capacity of present day workers.

The structure of demand may not matter, but it is abundantly clear that the level of demand is very important. Typically, youth unemployment rates increase 2 or 3 points for every point increase in the adult unemployment rate. In the past 25 years the youth unemployment rate has never been below 8 percent. However, the overall U.S. rate has only been below 3.5 percent once. In other capitalistic democracies which have experienced overall low unemployment rates the youth unemployment rates have been a lot lower. For example in 1970 when the U.S. youth rate was 9.9 percent, the rates were 1.5 percent in France, 9.3 percent in Germany, 2.0 percent in Japan and 2.9 percent in Great Britain. Thus there is nothing inevitable about high youth unemployment if labor markets can be kept tight enough.

In general the slack labor market alone cannot help to explain the racial disparity. Something else is required to explain why blacks are disproportionately affected by cyclical factors. There is substantial evidence that black unemployment is far more sensitive to the cycle than white unemployment. The explanation for this appears to be racism. However there is no evidence that racism has increased over time. If anything racism has decreased. The answer may be found in the consideration that racism acts as a dichotomous variable in the personnel selection process. The intensity of the racism may be less significant than its existence. If this is so, the increasingly slack labor markets could easily lead to the outcomes observed even if the intensity of racism has diminished.

To summarize, the causes of youth labor market problems are as follows:

First, there is no evidence that the labor market does not function properly for the vast majority of American youth. The youth employment situation is not in general getting any worse. In fact, there is some evidence that white youth may in fact be faring better than ever. Their E/P ratios are higher and abstracting from cyclical factors the unemployment situation is no worse. However, the labor market does appear to be malfunctioning for nonwhite youth.

Second, there is little evidence that the vast majority of youth are ill prepared for work. The evidence concerning their educational attainment and work experience suggest that the current generation of American youth may be the best trained ever. This also appears to be generally true for minority youth.

Third, nonpathological characteristics of youth associated with age experience and stage of life appear to be largely responsible for the youth adult unemployment differential. Whereas racism appears to be largely responsible for the racial job gap.

Fourth, insufficient aggregate demand appears to be largely responsible for the high level of unemployment in general. The unemployment rates of both black and white youth are very sensitive to cyclical fluctuations.

These four conclusions taken together suggest tht the current high level of youth unemployment cannot be attributed to special labor market problems or to the characteristics of youth. The current structure of unemployment is probably the result of normal market functioning, except where racial differentials are involved.

Implications For Defining The Universe of Need

The conclusions in no way minimize the significance of the youth employment problem. The fact of the matter is that in 1977 there were over 3 million unemployed youth, the racial gap for black youth was more than 1.1 million jobs, and youth would have needed 1.5 million additional jobs to have the same unemployment rates as adults.

Are we to accept these outcomes simply because they are the results that our market system produces? Our market economy is full of institutional rigidities and imperfections and it is these characteristics of the market which permit the high levels of unemployment. It is also these market imperfections that rob market outcomes of their optimum properties. This reasoning suggests that we are justified in dealing with the unemployment problem even though it is the outcome of the normal workings of our imperfect economic system. How much we are willing to do is a matter for social judgement and should be determined in accordance with considerations of equity as well as efficiency. The key question for equity is how much of a burden can society legitimately impose on any one citizen or group of citizens involuntarily in the name of efficiency. In particular, are we as a society justified in organizing our economic system in such a manner that it generates the gaps referred to earlier? These gaps by their very nature are not distributed equally across the population and as we have seen particular subsets of our population bear disproportionate shares of the burden. When we have decided how much of a burden we can legitimately impose on others involuntarily, then we will also have defined the portions of the job gap to be dealt with through public action.

Unemployment by its very nature imposes an involuntary burden on the unemployed because the very act of actively or passively desiring a job indicates that the individual would not choose the unemployed state if not for an inability to find a job. Moreover while it is possible that some individuals, are unemployed because of unrealistic expectations concerning working conditions or wages, there is no evidence that this is a principal cause of youth employment problems.

There are a variety of potential burdens imposed by unemployment not the least of which is the loss of the income from working. Any individual who seeks work has made a clear statement that the income which could be earned is valued. Consequently the failure of the economic system to provide full opportunities for work costs the unemployed billions of dollars annually.

Unemployed youth, especially those who have become discouraged and alienated, are also exposed to a variety of moral hazards. There is some evidence that unemployment is associated with higher incidences of criminal and other pathological social behavior such as drug addiction. While we usually focus on the cost that these activities impose on the society, it is clear that they also cost the involved youth dearly. Incarceration may not only cost the youth the earnings and psychic utility foregone during the time of incarceration, but also reduce the expected value of future earnings. Moreover these anti-social or pathological activities also increase the probability of serious physical damage or even loss of life for the youth engaged in such activities. The burden imposed on youth by the increased exposure to moral hazard is clearly very high.

Even if the youth does not sucumb to moral hazards, the inability to find a job, especially over the long term, may interfere with other plans such as family or household formation and investment in education or personal assets. There is also some evidence that spells of unemployment influence future earnings and future unemployment. While this effect appears to be of limited significance for whites, studies by Osterman and Stevenson suggest that the long term effect may be more important to blacks.

Unemployment may also impose other psychic cost in the form of lowered feelings of self worth and self esteem. This again is especially likely to be the case for those experiencing long spells of unemployment.

The point is that unemployment, especially long term unemployment, can clearly impose serious involuntary burdens on individuals that are not distributed equally across all individuals. This is the primary reason why the unemployment problem raises ethical questions. Although we frequently act as if a given unemployment rate, say 5 percent, means that "all of the people are 5 percent unemployed". it clearly does not mean that. If it did then unemployment would not raise ethical issues. The fact is however that the statement that "5 percent of the people are 100 percent unemployed" is much closer to the true meaning of the unemployment rate. Moreover it is also clear that some of us, generally including most policy makers, almost never experience any unemployment and in fact have much lower exposure to the risk of unemployment. Thus the distribution of both the unemployment burden and the risk of unemployment is systematically skewed and that is what raises questions of equity.

We have seen already that the risk of youth as a class, of being unemployed is significantly higher than the adult risk. In 1977 the youth employment levels would have been 1.5 million higher on the average if youth had the same risk of unemployment as adults. We have also seen that youth are more affected by the ups and downs of the business cycle. Thus, on the surface this would seem to violate the principal of equal treatment.

On the other hand, as we have seen, the youth unemployment problem does appear to be a stage of life problem for the most part. Moreover, the current labor market position of youth does not appear to be any worse than that of preceding youth generations and in fact may be a little better. Thus, the labor market burdens borne by youth in our society today are not anymore onerous than those borne by previous generations. And surely youth as a class are better off today than they were prior to passage of child labor laws and prior to the great expansion in resources for education.

If one adopted a criteria of lifetime expected burden, then the fact that all individuals pass through a youth stage and are similarly burdened implies that there is no problem of equity involved in the current treatment of youth in the labor market. The problem of making a transition to the world of work is an experience that all individuals must pass through and thus the expected life time burdens of all individuals are not distorted by the youth adult differentials.

If the above argument is correct the general youth problem is not an issue in equity. Questions of equity may arise in how the burden is distributed within the youth population. In particular the labor market position of youth who are disadvantaged by location, poverty, education, or race, is clearly worse than that for youth without any of these disadvantages.

These differences clearly raise questions of horizontal equity. It is absolutely clear that there can be little justification for the excessive burdens that blacks bear in the labor market. Thus it would seem that there is a clear need for public policies to eliminate these differences Our earlier calculations show that there is a need for about 1.1 million jobs to deal with this problem.

The problems of those who have non-racial disadvantages also have strong ethical charms. Although one may argue that youth have some capability for their lack of education, it is clear that this argument has limited merit because of the strong relationship between social and economic class and educational attainment. Certainly youth cannot bear the responsibility for the socio-economic achievements of their parents. The disadvantages of youth who reside in unfavorable locations are perhaps an even clearer example of unfair burdens.

The equity arguments are sufficient to establish the case for public policy to deal with the racial gap and the question of the distribution of the burden. Note, however, that this raises a general question of policy since these racial and distributional gaps exist for adults as well as youth. The rationale for restricting public policy to efforts to deal with the youth problem in isolation from the general labor market problem is not clear.

The problem of the youth adult differential as we have seen does not raise clear questions of equity. Thus the rationale for dealing with this issue apart from the distributional concerns discussed above must rest on efficiency considerations. There are two general issues. The first is whether or not the loss value from the high level of youth unemployment can be reduced. This depends on whether or not the labor market matching mechanisms can be improved sufficiently to reduce frictional unemployment at a cost less than the benefits to be gained from the reduction. Or, if it cannot, whether there is some alternative use to which these idle resources can be put that would generate benefits sufficient to compensate the youth. Unfortunately we do not have precise answers to either of these questions nor does space permit a discussion of the issues involved. However, the universe of need with respect to the youth adult differential and the generally high levels of youth unemployment depend in part of this determination.

The second consideration which modifies the stringency of the test implied above, concerns how much we as a society value reducing youth idleness. To the extent that we would place a positive value on involving youth in society in a different fashion than the economic system currently does, this would be positive consumption. And efficiency would require us to expend the resources so long as the collective consumption value was greater than the cost.

Implications for Government Youth Labor Market Policy

There are essentially three classes of policies that correspond to the possible causes of youth unemployment discussed earlier. These are manpower policies which work on the characteristics of youth, labor market policies, which work on improving the functioning of the labor market mechanisms which match people to jobs, and demand policies, which augment the free market determined level of demand for youth workers. Ideally it would be useful to determine how much should be invested in each of these types of programs to deal with the youth unemployment problem.

The programmatic implication of our analysis for manpower policies as a class is clear. Namely the youth/adult differential, the over all high level of youth unemployment, and the racial differential, can be affected only marginally by policies which operate on the supply characteristics of youth. As we have seen, the characteristics of youth which account for these gaps are nonpathological and are related to stage of life and thus cannot be reached by these programs since the characteristics of youth that can be reached by these programs such as education, skills, motivation, do not account for much of the gap. The proportion of youth who could not perform satisfactorily in at least several occupations, were jobs available, is extremely small.

This is not to say that human capital development programs are not worthwhile. They may in fact provide a useful mechanism for effeciently training youth without lowering any of the gaps in the aggregate. Whether it is more efficient to provide this training in the public sector or whether private employers should provide it is an open question. However, it does seem reasonably clear that this class of policies will not significantly influence the aggregate job gaps.

Manpower training programs may contribute to the resolution of another problem in the youth labor market. In particular, these policies may contribute to reducing the concentration of unemployment among the so called hard core disadvantaged youth. The size of this population group is unknown. However, to the extent that their human capital deficiencies reduce their chances in the labor market lottery, these policies could make a contribution to reducing their disadvantages and result in a more even distribution of unemployment within age, race, sex cohorts. However, as indicated by our earlier calculation concerning the impact of the non-white educational distribution, one could not expect these programs to have a major impact on the racial gaps.

Out analysis also suggests that there is a need for policies which change the basic market selection mechanism if there is to be a significant alternation in the favorable distribution of employment opportunities to adults, whites, males, the educated, and non-disadvantaged. The normal labor market mechanism leaves the employer free to select the most preference for individuals with the above characteristics. Thus, individuals with these characteristics can expect to receive a disproportionate share of jobs whenever there is labor market slack if normal market selection mechanisms are not changed.

Anti-discrimination and affirmative action policies have an important role to play in our effort to make a significant dent in the disadvantages of all of the minority groups. Clearly, however, the effort would have to be pursued on a much more significant scale in order to eliminate these gaps because as we have seen, the racial gap by itself is 1.1 million jobs. The gains to be had from improving the information flows and job matching capabilities of the labor market is limited in the aggregate. Supplying information is not a substitute for the entry provided by the superior contacts of advantaged youth. Disadvantaged youth search approximately the same way as others; they are simply less preferred as employees and therefore hired less often.

Our analysis indicates that the principal need is for policies that either increase the market demand for youth or supplement it with nonlabor market activities if either the high levels of youth unemployment, the youth adult differential, or the problems of the disadvantaged is to be seriously dealt with. As we have seen, limited demand is at the root of all of these problems given the nature of youth populations and employer preferences. If the labor market were sufficiently tight, then youth unemployment would be lower.

Demand enhancing policies can either work on aggregate demand or specifically on demand for youth. Policies such as youth differentials in the minimum wage and wage subsidies for youth could have some impact. However, it is doubtful if such wage subsidies would have a significant impact on aggregate youth unemployment since youth characteristics such as age, maturity and inexperience cannot be changed by these subsidies. Besides, these policies have other undesirable consequences

The level of aggregate demand has a substantial impact on the youth labor market. Thus, macro-demand enhancing policies could take a large share of the burden of reducing the excessive levels of youth unemployment. They would also contribute to reducing the aggregate gap between adult and youth population. However, there may be a limit to which aggregate demand can be stimulated without disrupting the economy. And according to some researchers, this acceptable unemployment level is increasing.

However, labor market alternatives can be devised to increase the demand for youth ranging from public service employment to a national youth service. Any of these or similar alternatives could provide satisfactory ways of accommodating supply to the level of regular market demand.

Quantitatively ranking policy options for dealing with different problems, it is clear that demand enhancing policies are the most important type for dealing with all three problems. Anti-discrimination policies are also believed to be a very important class for dealing with racial gaps. Human capital policies are marginally important for the racial gap and of intermediate importance for general distributional problems. The information policies are judged to have marginal importance for dealing with the racial and distributional problems.

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THE UNIVERSE OF NEED FOR YOUTH EMPLOYMENT:
THE REALITY BEHIND THE STATISTICS

by Marion W. Pines, Robert Ivry & Joel Lee

The Limitations of Employment Data

Almost all studies about the universe of need for youth rely in whole or part on employment statistics. Yet current employment data have very limited value in reflecting the universe of need for youth. In fact, many observers question how accurate the current state and local methodologies are for assessing adult need, let alone youth need. Even the method of allocating federal youth resources under current legislation is based, not on youth need indices like the dropout rate or the number of youth in poverty, but on employment statistics for adults. Why must we rely so heavily on these unemployment rates? The short answer is that they are the best available data, the only existing barometer of need uniformly collected and regularly available on a national level. But all too often, policy-makers ignore shortcomings of the data as well as the basic assumptions behind those data.

The Bureau of Labor Statistics looks at two major behaviors: Are you working? And, if not, are you looking for a job? If the answer to both questions is no, you are considered to be out of the labor force. All too often youth are considered out of the labor force. Many youth may not be actively seeking work. They may be discouraged workers, who feel that looking for a job isn't worth the effort. Many people perceive that no jobs exist for them; they do not, therefore, "waste" the energy to search for a job, especially if the search leads to the rejection that has often characterized their lives. These discouraged workers are also not counted among the unemployed in most estimates. The farther any group is from the mainstream of American economic life, the higher proportion of discouraged workers. The rate of discouragement is highest for the poor, minorities, older workers. The rate of discouragement is highest for the poor, minorities, older workers, welfare recipients and, perhaps, especially for youth. The range of possible job opportunities for the last group is limited geographically by a lack of mobility, conceptually by inadequate knowledge about the job market, and practically by inflexible school schedules and child care responsibilities. Consequently, they give up, and are never counted as unemployed.

Job-Search Time

In its needs assessment of the Summer Youth Employment Program, the Office of Management and Budget relied exclusively on these unemployment statistics. Beyond that, OMB decided that the universe of need should be limited to those youth who are unemployed for five weeks. More often, they will "test the waters" to see if a job is available. If they find no job, many simply stop looking, especially if the job search reinforces feelings of rejection and failure.

We have direct experience with how difficult it is for youth to sustain job search. Self-Directed Placement is a program designed to provide intensive job-search assistance. The success rate for SDP is phenomenal for adults. About 80-90 percent of the disadvantaged adults get jobs during the four weeks of the SDP program. We thought this might be a great way of assisting youth. But of the 16 kids first referred to SDP, only six of them got jobs. The SDP staff found that after the first few calls and the first few rejections, the youth gave up, and even the strong peer support could not bolster their courage. In an environment without the support that SDP offers, it is unlikely that youth would sustain a five-week job search.

Yet those youth who do not sustain a five-week job search are not counted in OMB's analysis. The analysis begins by excluding in-school and discouraged youth and then limits the universe of need even further by setting a five-week job-search parameter. Through statistical manipulation, OMB grossly understates the universe of need as it develops an index of need that is more palatable politically and less relevant sociologically.

Illogical Policies

The General Accounting Office has indicated that it, too, thinks there are more jobs available during the summer than there are eligible interested youth to fill them. Based on this supposition, GAO recommended a cut in summer programs. GAO rested its case on two observations:

- a number of youths enrolled in SYEP were ineligible and
- a significant number of the enrollees were 14- and 15-year-olds.

From these two findings, GAO decided that the universe of need had been exhausted. Prime sponsors had enrolled all eligible youth and were still underenrolled. Thus, GAO deduces, primes, in order to meet hiring levels, consciously enrolled ineligible youth and a higher proportion of 14- and 15-year-olds.

The fact that errors have been made in determining eligibility and that prime sponsors have seen fit to target resources to 14-year-olds is not a strong basis for assuming that the universe of need has been met. The fact is that prime sponsors do target summer jobs to 14- and 15-year-olds. They do so with sound economic and social rationales:

- For youth under 16, the summer program is often the only employment recourse because of child labor laws.
- Many feel that the behavior-change components of a work-experience program are more effective when offered early in a youth's experience with the world of work.

- Patterns of juvenile delinquency are built during ages 14 and 15. By providing these youths with working outlets, many youth may be able to redirect their energies toward constructive activity.

The kind of quantum-leap analysis done by GAO is a disservice to responsible public-policy setting.

Both the GAO and OMB studies find that youth need is more than met by current federal employment programs. Both suspiciously try to solve the youth unemployment problem by "proving"---or, more to the point, pretending--it doesn't really exist. OMB uses unemployment data without acknowledging its shortcomings and then creates additional parameters to further limit the universe of need. GAO uses some questionable logic to reach the same conclusion.

Baltimore's experience in operating a Tier 1 Entitlement program might well be instructive in measuring a particular universe of need. From our Entitlement experience, we can draw some reasonably firm conclusions about the universe of need and substantiate our judgement of just how conservative our local unemployment statistics really are.

The Youth Incentive Entitlement program is the national research and demonstration project, designed for a limited segment of the youth population, to test the relationship of a job guarantee to in-school performance, retention, completion, and future employability. The Entitlement method is analagous to counting the bees in the area by setting out a jar of honey. By guaranteeing every eligible youth a job, we got them to "stand up and be counted" in numbers that dwarfed our original estimates. Using traditional methodologies from unemployment statistics, the projected estimate of need would have been a fraction of the actual demand for jobs.

Eligibility Requirements

Under the Entitlement program, youth are guaranteed a job if they meet the following eligibility criteria:

1) youth must live within the geographic boundaries of the entitlement areas,

2) youth must be a member of the family which receives cash welfare payments or whose income is below the OMB poverty standard,

3) youth must be 16 to 19 years old, inclusive, and

4) youth must be enrolled in a secondary school or re-enrolled in an educational program that leads to a high school diploma or GED.

The Entitlement program defines a target group and a distinct, although limited, universe of need. As part of our planning for the program, it was necessary to estimate the number of young people who would be eligible and interested in taking jobs. The simplest way for us to have estimated the number of eligible youth in the Entitlement area would have been to check unemployment figures on the number of unemployed youth, 16 to 19 years old, and to apply some estimating factor for the number of those unemployed youth who were in poverty families. Not surprisingly, BLS data indicated that in the entire city of Baltimore, there were only 7,000 unemployed youth and only 5,000 unemployed minority youth. Using BLS data, we would have estimated that the universe of need in the third of the city covered by the Entitlement program would have been 2,500. We knew in our gut that this figure was absurdly low.

To achieve more accurate estimates on the size and location of the population in need, we had to devise better measures for identifying the universe using more relevant local data bases. We looked for those sources most likely to be updated regularly and most relevant to a youthful population. We zeroed in on local administrative files. From the public schools we developed information on school enrollments and dropouts for 16- to 19-year-olds in each census tract. As a proxy for family income, we looked at the number of youth qualifying for the school lunch program. From the local welfare agency we received information on the number of families receiving AFDC in each census tract, as well as the number of youth in their files and the addresses of potentially eligible youth. We combined these major sources of information with our own manpower registrant files and demographics on public-housing residents.

Aggregating this rich local data base enabled us to accomplish two important tasks:

- o identifying the neediest contiguous area of the city to become the Entitlement area within the parameters set under YIEPP and
- o estimating the universe of need in the target area.

Our estimate was that about 8,800 youth would be eligible at any one time. Remember, had we used BLS and census data, we would have assumed a universe of 2,500--less than one-third of our actual estimate. Based on our estimate, we expected 13,700 youths to enroll during the first 18 months. Today, after 18 months, we have enrolled 13,000. Our estimate was 5 percent too high. The estimate from unemployment data was understated by 70 percent.

The reasons are clear. The BLS methodology ignores many youth who are discouraged workers by considering them as out-of-the-labor-force. When we estimated the Entitlement universe of need, we made no such assumptions about the labor force status of in-school poverty youth. On the contrary, we assumed that 100 percent of these in-school eligible youth and as many as 80 percent of the dropouts would take us up on our offer of employment. BLS labor force-participation data suggest that only 41 percent of the youth population would take a job. Based on our experience with a job-guarantee program, it appears that normal unemployment estimates severely and systematically undercount the extent of need and the motivation to work among urban youth.

The Certification Process

What makes Baltimore's staggering enrollment levels so revealing are the rigid and burdensome program guidelines for eligibility certification, which impede, rather than facilitate, youth participation. While a guaranteed job is the big prize, youth must go through a bureaucratic scavenger hunt to find it. For the irony of Entitlement is that despite the job guarantee, youth must often work harder to get the job than to keep it. Consider the hurdles youth must clear just to get into the program:

- Youth learns of program and obtains a thick referral packet full of forms from a referral source.
- Youth and parent/guardian complete forms to reflect age, citizenship, school, income, and residency status and identify valid documentation to certify eligibility for each of the five areas.
- Youth goes to State Department of Labor to obtain a work permit.
- Youth goes to school to have school status verified or, if out-of-school, must re-enroll in an education program.
- Youth goes to a Social Security office to apply for a Social Security card.
- Youth brings completed packet to a registration location. Packet must include:
  - Social Security card;
  - work permit;
  - appropriate documentation to verify age, including birth certificate, baptismal certificate, driver's license or voter registration card;
  - income-statement form;
  - documentation to verify income, including either Medical Assistance card, W2 Form, recent check stub, or tax return;
  - residency status form;
  - documentation to verify residency, including rent receipt or utility bill;
  - school-status form;
  - documentation to verify school status (usually an authorized letter from a school official).

It should come as no surprise that less than 50 percent of enrolling youth come to registration with all of the necessary documents properly filled. But let me go on with the enrolling process required for kids to get their 15-hours-a-week prize.

- Youth then has eligibility verified at registration.
- If eligible, youth is registered for Entitlement.
- Youth is then matched to a job that
  - complements his/her educational experience;
  - is compatible with school hours;
  - reflects his/her vocational aptitudes and interests;
  - is in his/her own neighborhood;
  - often requires a job interview before the match is complete.
- Youth attends orientation prior to start-up.
- Finally, youth reports for first day of work.

While we in Baltimore have done our best to simplify this procedure, it is quite clear that youth must demonstrate motivation, persistence, and patience just to get a "guaranteed job." It makes our Entitlement enrollment figures of over 13,000 youth and the motivation of the kids all the more impressive. It clearly demonstrates the value of using demand for a guaranteed job as the true measure of the universe of need. We now recognize that many in-school youth need and will take jobs if they are available and, moreover, that many of these motivated youth do not look for jobs when the search is competitive. It is not because they are lazy; it is because they believe that there exist no jobs that they can qualify for, or be able to get to, or that are flexible enough to allow them to stay in school and work at the same time.

The eligibility standards for the Entitlement are rigorous--much more rigorous than any parameters applied to statistical analysis of the universe of need. But even with the narrow Entitlement-defined need, we found that more youth fell into that eligible universe than were projected to fall into the broader universe of unemployment. As we have seen within the city of Baltimore, the universe of need, as measured directly by participation in a job-guarantee program, is substantially larger than universe of need projected by traditional statistical means. Yet in making national policy decisions, we rely on the traditional unemployment data sources. That reliance can mislead us into believing that need among youth is adequately being met with the current level of resources.

If we projected the universe of need for the whole city of Baltimore, instead of just within the limited boundaries of the Entitlement area, we would anticipate that the number of eligible youth would more than double, from 8,800 to roughly 19,000. If we went a step further and included youths aged 14 to 21 instead of 16 to 19, the population would double again from 19,000 to around 40,000. Finally, if we raised the maximum allowable family income from the current OMB poverty standard to 70 percent of the lower living standard (the current CETA economically disadvantaged standard), the universe of need would double again to include more than 80,000 youth. If we offered a job guarantee throughout the city of Baltimore to every youth 14 to 21 years old whose family had an income below 70 percent of the lower living standard, we would expect to have 80,000 eligible kids knocking on our doors.

GAO and OMB may contend that most of the needy kids in our country are fully covered under current Federal spending levels on employment programs; but our experience under the Entitlement program belies their contention. The cost of providing a part-time job to 80,000 needy youth in Baltimore would be about $175 million. Offering, in addition to a job, a minimum of supportive services and educational assistance would cost an additional $40 million. A total cost of $215 million, just short of a quarter of a billion dollars, would meet the complete universe of job need in the city of Baltimore. Under all Titles of CETA in Baltimore, we spend about $30 million for youth annually. That includes Title IIB, YCCIP, YETP, and Entitlement, the summer program and the Job Corps. We, therefore, have the capacity to meet only one-seventh of the true universe of need for youth of Baltimore. Stated differently, we have resources to help one in seven eligible youth.

Training and Supportive-Services Costs

Providing jobs, however, is only the first step for building appropriate work behaviors, by providing income to allow youth to stay in school and contribute productively to the economy. If, however, the objective of Federal employment programs is to assist youth in successfully entering the private job market, much more needs to be done. We have found through experience that a job alone is not enough to take disadvantaged youth from a point well outside of the mainstream of the labor force and involve them directly in the mainstream. It takes remedial education, skill training, counseling, and in some cases, extensive supportive service.

Let's take, for example, the most severely disadvantaged youth: A 14- or 15-year old dropout who is functionally illiterate, a parent and in constant trouble with the law, has no skills and limited motivation. What would it take to make this youth employable by the time he/she reaches adulthood?

We have found that it takes a developmental approach, ie. providing a sequence of education, employment, and supportive services that are mutually reinforcing and complementary. It may well take 7 years of continuous comprehensive services, beginning with several years of intensive remediation, to bring the youth to the level of functional literacy. This would be followed by preparation for a high school diploma, career exploration, skill training, and transition activities to prepare the youth for higher education or full-time employment. These youths may require continuous supportive services, counseling, assessment, transportation, and day-care services (since more than 20 percent of our youthful clients are parents themselves).

What would it cost to make this severely disadvantaged 14-year-old youth employable by age 21? A work experience alone for 7 years would cost $27,000. Adding in the academic support needed to bring this youth to high school completion would increase the cost by $9,000. Counseling support over the 7-year period would add another $2,000; child-care services, an additional $6,500; and post-secondary skill training would add $3,000. Thus, the grand total to bring one severely disadvantaged youth into the mainstream of the labor market by age 21 could be as high as $47,000.

We know that it is not just the severely disadvantaged potential dropout who is suffering in the labor market. Our experience with graduates of our Summer Corps Program showed that fewer than 12 percent were employed 3 months later. This indicates that a short summer experience is not sufficient to affect the youth's access to opportunities in the labor market or their competitiveness for these opportunities. These disadvantaged youth who remain in school through graduation still need some level of service, though perhaps not as intensive, to prepare them for the transition to full-time employment after high school completion. Providing one youth in this category with work experience, administrative support and transition services from the age of 14 to completion of school would cost $15,600.

The total cost for this comprehensive treatment to a cohort of disadvantaged adolescents through entry into the labor market in Baltimore would be $280 million over a 7-year period: $108 million to provide services to approximately 2,500 severely disadvantaged 14- and 15-year-old dropouts; $171 million for services to 13,000 disadvantaged in-school youth.

These estimates represent only one cohort of the population in need. The annual cost to provide this level of service, both jobs and training, to the whole universe of need is difficult to immediately assess, but it would exceed the original $215 million estimate that provides for jobs and limited services only. To determine the total annual cost for comprehensive services in Baltimore--including skill training, child care, transition, and more intensive behavioral counseling--we conservatively estimate another $60 million. The real annual cost of meeting the universe of need (combining work, training, and intensive services) in Baltimore might exceed $275 million. Compared to our current resources of about $30 million, we could address only one-ninth of the universe of need. The problem is the same in every central city in the country: The need greatly outstrips the resources available to meet the demand.

Meeting the Needs

Our cities are being cut in two directions. First, unemployment statistics, which channel Federal resources, consistently undercount the number of jobless in cities. Our cities have the greatest concentration of the poor, welfare recipients, minorities, and the disadvantaged. It is specifically these groups that are often undercounted in employment statistics. These are the groups that are most likely to be among the discouraged who stop looking for work because their prospects are so dim and who, consequently, are never counted in unemployment statistics. Since much of the estimating procedure for calculating unemployment is based on Unemployment Insurance registrants, these statistics can be assumed to further undercount inner-city need.

But, second, unemployment counts are used for more than simply assessing needs. They are used to distribute Federal employment and training funds. Using these adult unemployment figures to distribute Federal resources for youth in effect diverts funds for employment programs from needy urban areas to less needy suburban areas. Let me give you a brief example. When we first received youth funds under YEDPA for six subdivisions within the Baltimore Consortium, we agreed to devise a youth-need funding formula to redistribute the resources within the Consortium. The youth-need index we developed relied on many of the same data sources used to estimate the size of the universe of need under the Entitlement--local dropout rates, youth in poverty, and so forth. Under our locally developed youth formula, one suburban county within the Consortium received an allocation that was about 14 percent of the money available for the whole metro area. Had we used the straight share of unemployment methods used to distribute that money nationally, actual need in this county would have been overestimated by more than 100 percent.

The combined impact on urban areas of using adult unemployment statistics to distribute Federal youth-employment funds is significant. The figures seriously underestimate need in urban areas and then tend to target funds away from those urban areas in greatest need. The current systems are devasting to urban areas.

We cannot believe that the current Federal effort meets the universe of need for youth. It certainly does not do so in Baltimore, and the same holds true for most cities. It is incumbent on us to ensure that Congress and Federal policymakers understand the assumptions behind the currently popular needs assessment and understand why they are misleading and inaccurate.

Next, the Administration and Congress must begin to use new data sources and include these in funding formulae. Pursuing the two objectives would allow us to face the real magnitude of need and ensure that adequate resources are targeted to meet those areas with the greatest concentrations of need.

THE SOCIAL PSYCHOLOGY OF POOR YOUTH

AS RELATED TO EMPLOYMENT

by

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Psychological Studies

The orientations of youth toward work have been the focus of some interests by social scientists and psychologists. Considerable effort has gone into the study of occupational interests (measured by such instruments as the Strong Vocational Interest Blank and the Kuder Preference Record). Vocational psychologists and psychometricians have carried out extensive research on the abilities needed for success in different occupations. They have developed tests of intelligence, mechanical ability, visualization, and of many other skills which would indicate whether one was more suited to one occupation than another-e.g., engineering rather than social work.

Fairly extensive psychological theory also has been developed regarding career development. Super and Hall (1978) have written an instructive chapter, "Career Development," for the Annual Review of Psychology. They present a generally accepted model of development based upon the work of Erickson and other psychologists (pp. 351 ff.). Up until the age of 25, persons are generally in a stage of achieving their identity, according to the model. During their late teens and early twenties they are involved in exploration of various kinds of jobs. As persons pass 25 years of age, they tend to enter the stage of forming commitments, and begin to take a particular occupation more seriously. Their performance begins to improve, their "career line" beings to slope upward. As they pass 35, persons move into the psychological stage of "generativity" which is accompanied by establishment in a career and continued growth in occupational productivity. After 45, certain persons continue to grow, others level off in their performance and still othersdecline. At about 60 years of age persons move into the "integrity" stage, and after 65 they tend to decline in occupational performance.

Super and Hall discuss recent research corresponding to the several stages of this model. They begin with the exploratory period when persons leave school for work. They recognize that "the rate of unemployment among young workers is often more than twice that of older workers, and the rate of unemployment among minority youth is often more than twice that of white youth,". The eight studies they then review all deal with college students. This is not accidental. The developmental model just sketched implicitly refers to persons entering the primary labor market, persons who will have a rising career line. Most poor people will not have a rising career line. They will enter the labor market as unskilled or semi-skilled workers and will tend to stay that way. It is not particularly interesting for vocational psychologists to study the interests and abilities of persons whose occupational futures are as maids or laborers. To the extent that the model of career development is a guide for research, that research will focus on mainstream Americans.

The inability to learn much about poor youth from academic psychology is illustrated in a massive longitudinal, nationwide study of students in grades 9 through 12 initiated in 1960 under the title, Project Talent. About 400,000 students underwent two days of testing. Emphasis was on achievement and aptitude measures (Flanagan and others, Chapter 1). Only twenty minutes was devoted to a personality test, measuring such things as "mature personality," with another twenty minutes devoted to interest measures in different occupations and activities.

The study was aimed primarily at using the original scores of males on the aptitude and other tests to predict occupational choices made five years afterward (chapter 4). Modest relationships were found which could be useful in counseling high school students about their future careers. There were other useful findings-e.g., persons from lower social-economic backgrounds were less likely to enter or graduate from college than persons from higher background even when all had the same ability scores (Chapter 2). The study, however, did not measure orientations about work itself, or about the preference for alternative ways of gaining money. Nor was there any concern for why some persons might not achieve stable employment or be relegated to very low status jobs.

If the mainstream of psychological research has ignored the issues of poor unemployed youth, there were a few efforts made in non-academic settings. In 1970, Norman Freeberg of the Educational Testing Service reported on an effort to develop measures for participants in the Neighborhood Youth Corps which would be relevant to them and could be used to evaluate program outcomes.

Freeberg developed items based upon pictorial content. In measuring vocational aspirations, he had pictures depicting 19 occupations which covered a wide range of statuses. The respondent was asked to indicate attractiveness of the job on a 4-point scale that ranged from, "This is a rotten kind of job," to "A great job." Measures also were developed regarding such matters as job seeking skills-e.g., questions about where to look for jobs-attitude toward authority, willingness to defer gratification, motivation for vocational achievement-would you stay on the job if you had to work long hours-and a series of practical skills such as reading a map, and sorting mail by ZIP codes.

Freeberg had the survey completed by 123 males and 133 females enrolled in various Neighborhood Youth Corps centers. He then correlated each of these measures against the rating given to respondents by their guidance counselors and by their work-site supervisors. No significant correlations were found between the ratings and vocational aspirations, plans, or interests. There were significant correlations with abilities such as job seeking skills, job knowledge, and map reading.

The more general attitudinal measures showed significant correlations only in scattered instances. Thus the measure of deferred gratification was a significant predictor of counselor ratings for males but not for females or for work supervisors; attitude toward authority was significantly correlated only with male work supervisor ratings. The lack of strong attitudinal predictors of work activity might stem from the limited measures made. There was no middle class youth group with which to compare the mean values on the attitudinal measures; hence, it was not clear whether the poor youth were, for example, much lower on deferring gratification than more affluent youth. It was only known that the ratings on that measure had no bearing on the ratings given by work-site supervisors.

In 1976, Freeberg reported a further study in which 399 mainly black Neighborhood Youth Corps out-of-school youth were surveyed upon completion of training in 13 cities. Questions were asked about job knowledge and willingness to work under adverse conditions. Job aspirations apparently were dropped from the study along with attitude toward authority and deferred gratification. Instead, measures were included of vocational confidence and personal-social adjustment-how one got along with one's family and the police. Ratings of the Neighborhood Youth Corps counselors and work-site supervisors also were obtained. About seven months later 219 of the participants were located and reinterviewed. Employer ratings of job proficiency were obtained for the 121 youth who were employed. Freeberg then related the first set of measures with the second. He did this by factor analyzing the second set of criterion data and discovering five factors.

Freeberg noted that when employment versus unemployment was taken as the dependent variable no significant predictors were found for males. Only a few significant onces emerged for females (including ratings of counselors and work-site supervisors). While it was possible to account for some of the variance in the quality of the employment experience of poor youth in this study, it was not possible to account for the unemployment experience. Freeberg, moreover, had no comparison group of more affluent youth with which to compare his results. Hence, it was not clear whether the respondents were abnormally high or low with respect to such things as wanting to keep out of trouble, or willingness to work under adverse conditions.

Goodwin's study at the Brookings Institution, reported in 1972, did compare the work orientations of poor and more affluent youth 15 to 19 years old. As part of a larger study, several hundred teenage sons of welfare recipients in Baltimore together with several hundred sons of more affluent families were interviewed about such matters as life and work goals. The same interview also was carried out with over 100 youth in a small, poor, black community outside of Washington, D.C.

Goodwin discovered that all groups maintained the same level of work ethic-the extent to which persons identified their own self-fulfillment with work. All maintained similar goals in life although the attaining of money and a good place to live was more salient among the poor. As might be expected, sons of welfare recipients were more accepting of welfare than the other youth even while they had less confidence in their abilities to succeed in the work world. Goodwin concluded that there were major similarities between poor and more affluent youth with respect to work orientations, and that the differences observed could be attributed to different experiences these individuals and their families were experiencing in life, especially success versus failure.

The study emphasized only a special category of youth, those on welfare, and results were primarily from a single city. There were no data on youth over 19 years old and the relation between orientations and work activity was not systematically examined. It may be that even while there are general similarities between poor and affluent youth regarding certain orientations, the way in which those orientations are linked together in influencing work activity may be substantially different. Or to put it another way, the basis for going to work or not may differ across social-economic lines.

While studies dealing with the work orientations of poor youth are hard to come by, there should be certain psychological concepts which could be applied to the employment situation of these persons. There are indeed two concepts which have been utilized in research on poor persons.

The first concept, expanded by Julian Rotter (1966), concerns a person's feelings of efficacy. Rotter attempted to measure the belief that success comes through one's own internally directed efforts as against success coming through external forces. This concept was measured through a series of forced choice items. For example, one was asked to choose either: a) Becoming a success is a matter of luck; or b) Getting a job depends mainly on being in the right place at the right time.

This approach assumed that the two choices were opposites. Subsequent analyses of the scales indicated not only that the paired statements were not direct opposites but that there were two sets of questions being asked. One set dealt with the general issue of personal versus outside force control, the other with one's own feeling of internal or external control (see Andrisani, 1978). The Rotter items and their revisions have been widely used in psychology and in a few efforts by nonpsychologists to understand the work behavior of the poor.

A second widely used psychological measure is that of "self-esteem." One of the major developers of this measure is the sociologist-social psychologist Morris Rosenberg (1978). He developed a ten item set that asks questions to be rated on a 4 point scale such as: I am able to do things as well as most people. Self-esteem has become important in psychology because its lowering has been related to certain psychological disturbances such as depression (p. 55). It also seems reasonable that persons who feel good about themselves will function better in various life tasks than persons who feel negatively about themselves.

Self-esteem research has been concerned with children and racial comparisons. It has been found that black children have as high or higher self-esteem than whites. Rosenberg (1978, p. 117) explains this on the grounds that persons develop self-esteem in the course of interaction with persons they deem important, and blacks tend to associate with other blacks rather than with whites with thom they might feel inferior. Furthermore, self-esteem and self-concepts are gradually internalized. At relatively late ages, 8 to 11 years old, children still believe that their mother knows more about their inner states than they do themselves (p. 245). It is clear that self-esteem and self-concepts are strongly influenced by the family experience. It also is known that orientations toward work are transferred from parent to child (Goodwin, 1972, p. 65). Yet, there is little systematic research on the relation of family experiences and orientations of poor youth to their subsequent work activity.

Longitudinal Youth Studies

Jerald Bachman and associates (1978) have recently completed their longitudinal study of a nationwide sample of more than 2,000 male youths, extending from 1966 when they were entering 10th grade in public high schools to 1974 when many of them had entered the work-force. Various social psychological measures, including those related to self-esteem and personal control over success were gathered along with such measures as parental social-economic status and intellectual ability. The major aims of the study were to determine: the effects of dropping out of high school, factors facilitating prediction of educational and occupational attainment; the impact of occupation and other experiences on attitudes toward race, job satisfaction, self-esteem. In terms of those aims, however, the study has some unfortunate limitations.

The attrition rate for respondents was not large, but it occured among those of lowest educational achievement and among blacks. Indeed, it was not feasible to compare blacks and whites because there were few blacks to begin with (256), and the differences between those in the rural south and those in the urban north were so great that the two groups could not be pooled (p. 28). Moreover, because of attrition there were only 8% blacks in the 1974 sample, whereas there were 12% in 1966 (p. 10). Hence the findings may not be at all relevant to inner-city black youth.

The focus of the study, like the focus typified by Super and Hall, was on levels of occupational attainment rather than on the factors that affected employment as such. In spite of the large number of variables measured, they were not derived from a social psychological theory of work activity. True enough, there were measures of occupational aspiration and characteristics of desirable and undesirable jobs (p.8). But there were no measures, for example, of attraction toward non-work sources of income such as quasi-illegal activities or various forms of government support. While the study was limited for our purposes, there were a number of significant findings.

Fifty percent of the variance in the youths' educational attainment in 1974 was accounted for by measures made in 1966 (p. 55). The single strongest predictor in the multiple regression question was the grade average of the youth in 9th grade. The next strongest was the social-economic level of the youth's family, followed by an intellectual ability measure. Neither the self-esteem or internal control measures maintained their significance when the demographics were added in the regression equation. The only attitudinal measures that were significant in predicting educational attainment were "college plans" and "negative school attitudes."

The National Longitudinal Surveys (NLS) have gathered data through the Census Bureau on nationally representative age-groups of Americans. A measure of personal control (PC) over success, based upon the Rotter scale mentioned earlier, was included in several of the surveys. Andrisani found that those male youths 14 to 24 years old in 1968 who gave higher ratings to that scale had significantly higher occupational status and job income in 1970 than those youths with lower ratings.

These findings held for 739 white youths and 250 black youths looked at separately, and even after controls were entered into the multiple regression equations for educational level, training, health, and marital status. Controls for ability and family social-economic status were not entered, probably because they were not available. The findings were similar for the middle aged men as well, suggesting some general predictive validity for the PC measure. Data were not available for young women, but the middle age women PC was significantly related to hourly earnings and occupational status only for whites.

The improvement in earnings for black or white youth with high PC scores as against those with low scores translated into an hourly earning increase of only $.20 (p. 124). While this differential impact is statistically significant it is nowhere near as great as that observed for different levels of education attainment. The analysis of PC ratings was restricted to youth who were employed full-time and out of school at both the 1968 and 1970 periods of interview. Thus, the measure was not used to predict unemployment or else was insignificant there.

Andrisani tested certain other orientations as predictors of earnings and occupational status. He found that increased occupational aspirations led to increased annual earnings of male youth, while high expectancy to actually achieve one's occupational goals was positively related to earnings and status (p. 152). This held for blacks and whites. There also were fewer weeks of unemployment for those with high aspirations and expectancies.

Among young women, the attitudinal findings are scattered. Only whites were in favor of mothers actually working somewhat more in the labor force. Only those black young women who expressed greater commitment to work were in somewhat higher status positions two years later. Andrisani did not draw together the meaning of the several attitudinal measures by including them in the same regression equations. Nor was there any understanding of what was needed in order to raise PC scores, or raise commitment to work. Certainly, a rise in rating that occured only because people heard it was desirable to rate those items higher would have little effect on work activity. While the NLS demonstrates the potential significance of psychological orientations in predicting work activity, it does not carry the issue very far.

Using the National Longitudinal Surveys, Andrisani (1978) explicitly considered a young female cohort. The social psychological variables measured in those surveys were extremely limited, so that little light is thrown upon these women's views of labor force participation. It was found that the more that young black women said they were committed to work, the more they were likely to be in the work force and advance occupationally (p. 168). White young women who believed more strongly that mothers should work, spent less time out of the labor force than other white women (p. 168).

Using the same NLS data, Mary Corcoran (1979) has examined whether lack of early work experience affects women's subsequent employment and earnings. Her analysis suggests that for women with less than 14 years of education, teenage nonemployment may lower the probability of employment in the shorter run and earnings in the longer run (p. 51). What cannot be made clear is how many of these teenage women choose not to work because they prefer to take on other roles, such as wife, and how many have this choice forced upon them by lack of jobs.

Youth Employment Program Studies

If the longitudinal studies referred to in Section 3 were of limited use for our purposes, one could argue that they were not designed primarily to illuminate the basis for labor force participation of youth. On the other hand, three current programs, the National Supported Work Demonstration, the Youth Entitlement Demonstration and the Job Corps were specifically designed to improvement youth employment, and one might expect them to illuminate the psychology of poor youth.

The Supported Work Demonstration provides poor persons who have had difficulties in finding work with employment experiences, training, and counseling (Maynard, 1979, p. 1). Through this temporary effort, which might last as long as a year, persons are presumably helped to find jobs in the regular labor market. Among the target groups are out-of-school youth 17 to 20 years old, referred to the program from such sources as courts, drug treatment agencies, and the Employment Service. There was random assignment of 238 youth to Supported Work and 252 to the control group. Males made up almost 90% of those assigned (pp.8, 129).

The basic analysis in the interim report reviewed here compared the employment patterns of the experimental and control groups over an 18 month period. The data showed that while they had supported work, the experimental youth worked much longer than the control youth-148 hoursper month for experimentals as against 32 for controls during the first three months of supported work. As the experimentals left the program, the extent of their work effort declined. About 10 months after leaving supported work (18 months after the inception of the program) the experimental and control youth were both working only about 60 hours per month. The average hourly earnings for both groups at that time was about the same, $3.30 per hour (p. 135).

This disappointing employment trend was noted by the researchers, but they were unable to offer any explanation for it. The social-psychological framework sketched in the previous section can be used to suggest an explanation. The supported work enviroment, including the attention and training provided by concerned staff, might have raised the youth's intention to work full time and reject other forms of income. This in turn might have raised their work behavior while in the program. As time went on, however, and the experimental youth left the program, their enthusiasm might have been eroded by interaction with peers in their neighborhood who perhaps stressed other-than-work sources of income and non-work activities. The experimental youth along with those in the control group might have experienced increasing job dissatisfaction. It is known that low job satisfaction significantly increases turnover, especially among youth (Andrisani, 1978, p. 46). The job market might also not have been conducive for obtaining regular employment. In any case, the experimentals might exhibit the same level of labor force activity as the controls because the initial psychological boost from participation in supported work was eroded by the kind of day-to-day interactions met in the environment.

The above scenario cannot be tested because no data were gathered about the orientations of the experimental or control youth nor about feelings of job satisfaction. The model proposed by Maynard and others does not consider the feelings of participants or the quality of interaction between staff and participants and between participants and their friends and families.

If the above scenario had been tested and found to have some validity, then, one could estimate the kinds of changes needed to be made in the psychology of poor youth, in their efforts, and/ or in the job market situation which would markedly affect their work activity. The resources needed to affect these changes could be realistically estimated. Policymakers might choose not to expend those resources. But at least the issues involved-the social, psychological and economic costs and benefits-would have been made clear. In order to develop and test a social psychological model of labor force participation it is necessary to have researchers on the program evaluation team who have skills in that area.

Another major program affecting youth employment is the Youth Entitlement Demonstration. The aim of the program is to provide poor youth an opportunity to gain work experience as an incentive to remain in school. Thus, about 30,000 poor youth have the opportunity to work at part-time jobs during the school year and full-time jobs during the summer as long as they remain in or return to school (Barclay, 1979, p. xvii). The effort began the spring of 1978, and so is not far enough along to be evaluated (p. 11). Never-the-less, the conceptual design of the evaluation is instructive.

The evaluation researchers have given considerable thought to the task. They note that: "The basic explanatory variables in this analysis are sex, race, age, site, parents' education, family structure, and previous school attainment or employment, school year employment, and summer employment" (p. 149). The explanatory variables are reasonable, but probably not sufficient for the task undertaken.

Demographics are being viewed as causal variables in a process which has key social psychological elements. No recognition is given to the possibility that orientations held by the youths might significantly influence their actions in the feedback manner. One might expect youth's orientations toward school, work, family of origin, peer groups, other-than-work sources of income to affect their action, and for the results of action-e.g., successful employment-to affect these orientations. Without measures of these matters, the explanatory power of the models and their meaning for policy are likely to be lessened.

These comments are in no way meant as judgments on the Youth Entitlement program itself. However, whether the program succeeds or fails, it is important to know the reasons why. Only then can failures be corrected and successes improved or made more assured. It is difficult to believe that a program involving a complex interaction of individuals can be understood adequately without taking into account the orientations of the relevant persons.

One of the major efforts at helping poor youth has been the Job Corps. Youth receive training and other services at sites away from home. Given the large amount of funds spent on this program over the years, it is surprising that there apparently has been but one research study of its non-economic impacts, and that only a pilot study (Goldberg and others, 1978). Part of the aim of the research was to predict subsequent employment of youth who registered at certain Job Corps offices. The measures gathered from the initial interview were reasonable as far as they went. They included job knowledge items on work ethic and confidence in one's abilities, items on self-esteem and optimism, and a list of biographical questions. The researchers did not, however, develop any theory of work activity which might have led them to create measures regarding the acceptability of alternative sources of income, orientations toward family, peer groups, and economic self-sufficiency.

Limitations in the measures made were coupled with severe sampling difficulties of which the researchers were aware. The initial self-administered questionnaire was completed in Job Corps offices in a non-random sample of large cities. Large number of Job Corps registrants apparently refused to complete the questionnaire because it took 13 months to obtain 1,210 responses (p. 172). At the time of reinterview almost half the initial respondents were still in Job Corps or their status could not be determined (p. 173). The bias introduced because of that situation remained unknown.

Of the 489 who completed a post-program interview, about 35% had spent three or more months in Job Corps, about 45% had dropped out before three months, and 19% never showed up at a Job Corps camp at all (p. 173). The latter were reinterviewed about three months after leaving Job Corps. That created some difficulty in analysis because two of the criterion employment measures were length of time employed since leaving Job Corps and percent of time employed since leaving Job Corps.

The third criterion measure was current employment status. Only about 25% of the reinterviewees were employed. It was perhaps because of the small number of employed persons that the researchers apparently pooled all respondents-including not only those who never showed up at Job Corps with those who did for differing periods of time, but males as well as females. This is not a desirable procedure, especially when no multivariate analysis is undertaken, because significant relationships in one subgroup might be obscured by no relationships in other subgroups.

In any case, the researchers found virtually no significant correlations between initial measures and subsequent employment status or length of employment of reinterviewees (p. 53). Results from this study do not, therefore, elucidate the psychology of poor youth regarding work.

The youth programs reviewed thus far have been large efforts carried out at many sites, and the evaluations have been statistical. The effort reviewed now is quite different, a residential center in New Haven where about 20 youths at a time could stay. Ira Goldenberg (1971), a clinical psychologist and first director of the center, has presented a great deal of qualitative data regarding the experience. These include descriptions of events which characterized the activities of the youth and the staff.

The youths were referred by courts and other organizations which dealt with poor teenagers in trouble. Staff consisted of indigenous persons who grew up in poor neighborhoods and were committed to helping the youthful residents reshape their lives and obtain regular employment.

A major thrust of the effort was to involve these residents in the ongoing operation of the Center, including the setting of certain house rules.

In addition to the experimental group, there was established a control group of youth who might have attended RYC but were ruled out because their difficulties were not deemed sufficiently serious. Nine months after the RYC experience, the experimental group was much more gainfully employed than the control group and was in trouble much less with the law (pp. 408 ff.). The numbers of youth involved in the study were small, and the controls and experimentals were not randomly assigned. The results were so consistently positive, however, as to suggest that something significant did happen through the RYC.

No information was provided about a longer-term follow-up. It is possible that there was a subsequent decline in work activity among the former RYC youth, even as there was among youth who had participated in the Supported Work demonstration. The important point, however, is that it was possible through intensive effort of staff persons and the youth participants themselves to make a substantial difference for at least a short time in the employment experiences and perhaps life styles of severely disadvantaged youth. This suggests again, that something can be done, there can be positive psychological impact on youth. It also suggests again the need to understand the nature of this impact and the subsequent conditions which reinforce or erode the initial positive impact.

The largest effort at training and placing poor women in jobs has been through WIN. The Richardson (1975) study is the only one to consider the efforts on youth. Two-thirds of the 518 youth, sampled from 14 WIN sites around the country, were women. They were interviewed about 24 to 30 months after their termination from WIN.

As might be expected, the labor force participation of the men was consistently greater than for that of women-remembering that these women had dependent children (p. 123).

Of particular interest was the finding that young women who obtained jobs through WIN efforts had a longer immediate post-WIN work history than the other women. However, as time continued to flow this effect disappeared (p. 128). The same result was seen for women and men with respect to on-the-job training and vocational training. There was an immediate upsurge in work activity for persons who received that training, but the effect disappeared over the next two years (p. 130). That labor market conditions play a significant role in this process was indicated by the large differences in labor force participation just after leaving WIN across the different sites (p. 190). This immediate employment provided a long term advantage in that it was a strong predictor of longer run labor force activity (p. 132). In-as-much as no measures of psychological orientations were made, it was not possible to determine the effect of such matters as family commitment on the work activity of the young women.

It is clear that youth in general and poor youth in particular have high nonemployment rates (Freeman and Medoff, 1978; Barclay, 1979). It also is clear that youth leave jobs more readily than others because of feelings of job dissatisfaction (Andrisani, 1979, p. 46). Employers tend to see youths as relatively unreliable and unproductive workers (Regional Institute, 1976; Richardson, 1975, p. 158). At the same time, there is evidence that when certain kinds of training and work programs are established for poor youth, their work effort increases markedly. This was seen in the Supported Work demonstration in several cities (Maynard, 1979), the Residential Youth Center in New Haven (Goldenberg, 1971), and in the WIN program across 14 different sites (Richardson, 1975). This spurt in work activity, however, tends to decrease over time as the youths leave the programs and have to make their way in the regular labor market. Major questions are why the increase in work activity occurs, and why the decrease follows?

There is no research that bears directly on those questions. Evaluations of the relevant youth programs have not been concerned with such matters, and social scientists in general have not elucidated the social psychological basis for poor youth working or not. It is possible, never-the-less, to piece together certain research findings and at least pose some tentative answers.

Goodwin and Wilson (1979b) have shown that at least three psychological orientations, together with demographic characteristics such as persons' work experience, directly influence the subsequent work activity of men and women entering WIN. If orientations have a direct effect on the length of employment of poor adults, it is likely that orientations (whether similar to those of adults or different) also have such an effect upon poor youths. This is especially likely since the demographic characteristics of youths, such as previous work experience, can be expected to play a lesser role in predicting subsequent work activity.

One of the predictive Goodwin and Wilson orientations was intention to be economically independent. It is not unreasonable to assume that this orientation would be influential for youth. Interactions with staff in the special programs might have increased such an intention which in turn led to greater work activity. One can hypothesize that in the appropriate training setting poor youth are experiencing an increase in their feeling of personal efficacy and worth, and that leads to an increased intention to be economically independent which leads in turn to increased work effort.

What would account for the decline in work activity after leaving the programs? One possibility is that youths cannot find jobs in the regular labor market which are as good (with respect to wages and working conditions) as those they had in the programs. Another possibility is that peer group influences draw these youths into non-work activities or other-than-work ways of obtaining money, thereby reducing the strength of key orientations.

In short, loss of employment has a negative psychological impact which discourages poor persons from further work effort. Such discouragement may underlie the findings of Becker and Hills (1979) and Corcoran (1979) that low employment during the teenage years seems to affect negatively the subsequent earnings of black teenage males and the short-term employment rate and longer term earnings of poor teenage women.

The public policy significance of these findings is as follows. The cost of high unemployment is more than economic. Conditions which cause poor people to lose jobs or be unable to find work discourages them from trying to attain economic independence. Such conditions also promote strain within families (Pearlin and Lieberman, 1979) and probably increase marital separations. These other costs should be taken into account in the formulation of economic policies.

For the reasons just given, programs which facilitate youth employment can be valuable. The overall effectiveness of existing programs is obviously limited since youth nonemployment among poor blacks reamins very high. On the other hand, as just noted, certain programs have had some success even if it was only temporary. Knowledge about the factors promoting short term and long term success-so that the programs can be improved-will not be obtained until the evaluations of program efforts are based on a more complete theory of the work activity of poor youth.

One cannot look to academic social scientists for this advance in theory. The efforts of psychologists, for example, tend to focus on the basis for success among more affluent youth (see Flanagan and others, 1971; Super and Hall, 1978). Sociologists and social psychologists who have carried out longitudinal studies of youth have tended to ignore the poor; they also tend to focus on variables such as socio-economic status which have little policy relevance (see Sewell and Hauser, 1975; Bachman, 1978).

One way of moving ahead is to broaden the mandate and composition of the program evaluation teams. These teams should be asked to determine why a program works or not, not just whether it works. This means they need to be staffed with persons who can elucidate issues of motivation and personal interaction as well as persons who consider broader social and economic issues.

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ESTIMATING THE SOCIAL COSTS OF YOUTH EMPLOYMENT PROBLEMS

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The Basic Model

High rates of unemployment for youth aged 16-24 have lately been recognized as a serious and persistent problem, with immediate and long-term implications for the youth themselves as well as for the nation at large. The income and living standards of a large proportion of the population (persons aged 14-24 constituted over 20 percent of the total United States population in 1977) are jeopardized by high levels of unemployment among young people, as are the prospects for their successful integration into adult work life and family roles.

Concern has also been expressed for apparently lower levels of academic achievement among youth today, high rates of suicide and other signs of mental disturbance, high rates of teenage pregnancy and illegitimate births, the low level of qualifications of volunteers for the armed forces, and high rates of venereal disease, substance abuse, and violent crime among teenaged and young adult persons. There is reason to believe that many of these problems of youth are interrelated with one another and that, in particular, many of them are related to unemployment among youth. Almost certainly, then, some of the increase in many problems and pathologies of youth may properly be understood as among the social costs of youth unemployment.

Youth unemployment cannot, of course, be assessed without taking national economic growth into consideration. Generally, national economic growth has been enormously beneficial; it has, for example, brought greater length of life to all age groups and both sexes through long-term improvements in nutrition, shelter, sanitation, education, stabilization of the economy and overall reduction of life stress.

There have, however, been some important social costs associated with long-term economic growth, especially during the last thirty years. Many of the burdens have fallen on the subpopulations that are less well educated and of comparatively low work skill-particularly the young and elderly. One of the major problems associated with economic growth for youth of lower socioeconomic background is due to the long-term decline in availability of traditional jobs of low socioeconomic status--especially in the manufacturing, extracting and agricultural industries, and in small business. Without relatively sophisticated training for a specific career, usually obtainable only through formal educational institutions, youth of lower socioeconomic background often find career possibilities bleak. It is increasingly difficult to obtain career-orientated, low skill employment in industries which provided such work to previous generations.

This trend occurs at a time when college has made the career path easier for youth of higher socioeconomic background, and is the primary avenue to upward mobility in the modern economy. This trend is also occurring at exactly the time when, for the society as a whole, the standard of living (in terms of real per capita income) has been moving increasingly higher. It is precisely this contrast between majority increase in living standard and the apparently bleak work future--and present--for youth of low work skills and education that creates a sense of extreme frustration and subsequent desperation. This sense of desperation is further exacerbated by another long-term and profound trend which also arises out of the secular trend in economic growth; namely, the emphasis on individual achievement--rather than family social position, sex, age, ethnicity or national origin--as the basis for the person's social value and, ultimately, self worth.

Research efforts have been made to identify the social costs associated with these problems of youth employment. Such costs have been estimated in the areas of greatest concern to the society: physical and mental health, and criminal aggression. This research has been based on a modified version of a time-series model by which overall social costs of the national unemployment rate were estimated on behalf of the Joint Economic Committee of Congress in 1976. 1/

This model was used to estimate the social costs of overall unemployment in terms of additional deaths, hospitalizations, imprisonment, and other pathologies associated with a sustained one percent increase in unemployment rates. Since the publication of the report of this study in October 1976, the model has been extended both theoretically and methodologically. Theoretical developments include the incorporation of measures of rapid economic growth, found to be deleterious to well being, and the cumulative effects of multiple stresses over a period of time, also found to be damaging. The methodological changes involve primarily better methods of calculating the distributed lag effects of unemployment on various measures of social pathology. This analysis adopts the model to estimate the social costs of youth unemployment using three substantial facts: (a) the ratio of the unemployment rate of 16-24 year olds to that of the general population and, where appropriate, the simple unemployment rate for the 16-24 population; (b) the secular trend in economic growth, estimated by an eleven-year moving average in real per capita income; and (c) the proportion of 16-24 year olds in the general population.

1/ U.S. Congress, Joint Economic Committee. Estimating to Social Costs of National Economic Policy: Implications to Mental and Physical Health and Civil Program by M. Harvey Brenner. Washington G.P.O. October 1976.

The indices used as measures of social cost reflect three areas of damage to social well-being--physical and mental ill-health and criminal aggression. For youth, many of the indices cut across these three conceptual areas. Thus, the pathological data include: (a) mortality rates, specifically: suicide, homicide, and motor vehicle accidents; (b) state and county mental hospital resident patients; (c) arrest rates, specifically: criminal homicide, manslaughter, assault, forcible rape, robbery, burglary, larceny, forgery, auto theft, narcotics, prostitution, and total arrests; (d) crimes known to the police, specifically: murder, manslaughter, aggravated assault, forcible rape, robbery, burglary, larceny, and auto theft.

Both the arrest and rates known to the police are used in this study to measure trends in socially injurious illegal behavior. The principal reason for this is that there is a long-standing controversy among professional criminologists over the meaning of each of these commonly used indices of crime. The arrest rate is traditionally preferred because considerably greater detail can be obtained about the alleged violators' age, other personal characteristics, and purported criminal acts. However, specialists in this field have also come to regard official crime statistics as representing societal reaction to disturbing behavior. In keeping with this latter view, crimes known to the police is a superior measure of socially injurious behavior in that it represents at least the trend of crimes that are regarded by the public with sufficient alarm to be brought to the attention of authorities. For the present study, sufficient merit is seen in an emphasis on both the "detailed recording" and "societal reaction" views to use indices representing each of the two types of data.

At the same time, it must be pointed out that even crimes known to the police substantially understate the actual number of crimes committed. Further, in no sense are these crime indices to be understood as more general measures of socially "deviant behavior" especially since they are generally biased toward the inclusion of crimes by persons of lower socioeconomic background. Nevertheless, these measures apparently do indicate the type of criminal behavior that is most feared by the public.

Two mechanisms by which youth may seek to counter the effects of unemployment are through higher education and enlistment in the armed forces. Indices of these tendencies are used to measure the readiness to use such available fail-safe mechanisms. Finally, the birth rate (by age of mother, for youth) is used as an indicator of the assumption of responsibilties for children which frequently is related to employment decisions and has long-term individual and social implications.

STATISTICAL ANALYSIS

Variables in the Basic Education

The hypotheses involved in all of the analyses included:

(1) Long-term economic growth, measured by an eleven-year moving average of real (i.e., deflated) per capita income, would show a positive relation to the social cost indices, especially between the second World War and the current period.

(2) Youth unemployment, particularly as a ratio to total unemployment of the work force, would be positively related to the indices of social cost.

(3) The proportion of youth (ages 15-24) in the general population should be positively related to the indices of social cost, since the incidence of youthful reactions to societal problems, as distinguished from the reactions of adults or the elderly, should increase with a greater proportion of youth in the population, and since the extent of competition among youth and against youth by other age groups depends on the proportion of the population that is youthful. Such competition for employment is a source of youth employment problems and should contribute to the incidence of social costs.

The analysis requires controls for certain other variables. Inflation is among the most immediately relevant variables useful at least as a control in this analysis. Inflation has not been made a prominent independent variable because of its relatively unstable performance as a predictor of adult pathology in previous research (JEC), and because its effects are already largely accounted for through the deflation of the per capita income variable. In any case, on the possibility that it might be significant for some of the property-oriented crimes, it was tested in this analysis. In only one instance--burglary among crimes known to the police--was it found positive and significant.

Since, in the case of the criminal justice data, an important element of the "production" of these data represents police activities, tests were made of the importance of police manpower. This manpower variable is used, at a year's lag, to enhance explanation of the criminal justice data, since it was reasoned that the effects of any administrative change in the involvement of police would occur over a period of months.

Other types of control variables were used in the different equations according to subject matter. For homicide of white males, the narcotics arrest rate was included in order to control for assaultive acts arising out of the major source of rising property crime as well as possible escapist behavior. For automobile accident mortality, controls were used for motor vehicle registrations, miles travelled and the national unemployment rate--since it was assumed that traffic accidents would increase with heightened industrial activity. Narcotics arrests required controls for indicators of (a) illness related to heroin use--i.e., hepatitis incidence rates, and (b) diversion of narcotics users to mental health treatment centers rather than correctional facilities. Youth arrest rates, on the other hand, were used as controls in estimating the rate of youthful patients in mental hospitals (statistically discounting their correlation with the ratio of youth to total unemployment rates).

Findings

The ratio of youth to total unemployment rates is clearly an outstanding factor in nearly all of the major pathologies examined in this study. Among the health indices, it is statistically significant in homicide mortality at nearly all ages and motor vehicle mortality for 15-24 year olds, as well as 15-24 year old mental hospital resident patients. It is significant in all the major "index" crimes reported to the police except larceny, and for arrests among 15-24 year olds, it is significant for criminal homicide, assault, forcible rape, robbery, auto theft, narcotics, prostitution and total arrests.

The ratio of youth to total unemployment rates is similarly significant in the male military personnel rate for the 17-24 and 20-24 age groups, and for percent of individuals aged 18-24 attending college and professional school by sex. This variable is negatively related to the birth rate for mothers 10-14 and 15-19 (and nearly significantly negatively related to the birth rate for 20-24 year old mothers).

The simple unemployment rate for youth was not significant in any of the cases cited above (in which the youth to total unemployment rates was significant). Nevertheless, it was significant in suicide of nonwhite males aged 15-24, and for youth arrest rates in the property crime categories of burglary, larceny and theft, and forgery and for crimes against families and children. Annual change in the youth unemployment rate, in addition, was significant in the robbery and burglary categories of crimes known to the police.

The eleven-year moving average in real per capita income was significantly positively related to the overwhelming number of indices of youthful pathology including all of the mortality categories and nearly all categories of the two sets of criminal justice data. It is also positively related to the birth rate for 10-14 year old mothers, a trend that is the opposite for birth rates of all age groups of mothers age 15 and over. The single pathological indicator for youth showing an inverse relation to this variable is mental hospital resident patients. This finding probably reflects the long-term tendency for youth to utilize community mental health services, rather than mental institutions, when requiring psychiatric care.

The youthful proportion of the population is a prominent variable in several of these analyses. It is especially important in the mortality data for homicide, in crimes known to the police in the categories of murder, manslaughter, aggravated assault, robbery, burglary and auto theft, and in narcotics arrest rates.

Policy Considerations

It is clear that the key variable involving youth unemployment that is linked to the vast array of youthful pathologies is the ratio of the youth unemployment to the total unemployment rate. Moreover, it is not the simple youth unemployment rate that is important in these pathologies; the simple unemployment rate, even when statistically significant, does not in general show a substantial impact.

The most general conclusion which can be drawn from the foregoing analysis is that if the policy intention is to lower the social costs associated with youth unemployment, the most fruitful approach would appear to be a minimization of the ratio between youth and adult unemployment rates. The traditional countercyclical policy measures, however, have not had a substantial beneficial effect on the problems associated with youth unemployment in the past three decades, and are unlikely to do so in the near future. The reason for this is that these policies have concentrated on lowering the general--and primarily adult--unemployment rate, and have allowed the youth unemployment rate to remain at a relatively high level even during comparatively prosperous times.

In fact, to the extent that the youth unemployment rate is not lowered, counter-cyclical measures (to reduce the overall unemployment rate) may result in the tragic trade off of a decrease in adult pathology as against an actual increase in youthful pathology. It is only if the counter-cyclical--or counterstructural--unemployment policy brings at least proportionally equal benefits to youth as it does to adults that the social costs of youth unemployment will decrease substantially.

Not only are counter-cyclical policies specifically likely to have minimal impact on the amelioration of the social costs of youth unemployment, but policies which stress the short-run are in general unlikely to have a significant beneficial impact. The reasons for this, very simply, are that: (1) each of the youthful pathologies under study has shown a secular trend increase since the second World War and (2) the difference between the youth and total unemployment rate shows a secular trend increase during the same period. It is clear that unless policies are adopted to alter the long-term trend in the differential between youth and total unemployment rates, then that trend may continue to rise into the foreseeable future.

Still another indication that short-run policies, even to decrease that ratio of youth to total unemployment rates, may prove problematic is that an additional indicator of social cost--the birth rate to girls age 10-14--tends to increase when the ratio is low. More fundamental policy responses to youth unemployment, organized to affect the relationship of youth to the larger society and to assist in their transition to adult status, could probably alter the circumstances of youth enough to be effective.

The data on college attendance and the size of the armed forces indicate that career-oriented institutions which offer training are regularly utilized in substantially greater numbers when the ratio of youth to total unemployment rate increases. This suggests that if other such career-oriented fail-safe devices for unemployed youth were available, both the youth unemployment rate and the associated social costs would fall. Moreover, to the extent that future policy were to emphasize career-oriented manpower training--presumably toward employment in sectors of the economy which show upward trends of activity--it seems likely that the response from unemployed youth would be substantial and enduring.

TABLE I

KEY MULTIPLE REGRESSION EQUATIONS OF NATIONAL ECONOMIC INDICES ON PATHOLOGY[2,3]

(1   1976)

Dependent	RHO[1]	Constant	11-Year Moving Average of Per Capita Income	Ratio Youth Unemployment Rate to Total Unemployment Rate	Percent Population Ages 15-24		Rate of Youth Narcotics Arrests, Lag 2	R^2	D.W.	F-Statistic
Homicide Mortality Rate										
1. Males[4]	--	-23.46** (-9.18)	.00066 (1.10)	3.66** (3.96)	155.69** (8.86)		--	.97	1.67	283.60**
2. Nonwhites	.78** (6.42)	-33.33* (-2.75)	.0064 (1.62)	9.93* (3.01)	126.49 (1.39)		--	.95	1.45	143.42**
3. White Males, 15-24	.60** (3.79)	-4.73 (-1.44)	.0023* (2.98)	1.81+ (2.25)	-9.18 (-.39)		.47* (3.33)	.98	1.88	332.03**
4. Nonwhite Males, 15-24	.76** (6.00)	-105.43* (-2.61)	.02 (1.23)	29.74* (2.62)	337.46 (1.08)		--	.93	1.46	101.13**
Motor Vehicle Accident Mortality Rate				Ratio Male Youth Unemployment Rate to Total Unemployment Rate	Motor Vehicle Registration	Annual Changes in Miles Travelled	Total Unemployment Rate			
1. Total, 15-24[4]	--	41.27** (3.76)	-.01+ (-2.14)	5.95+ (2.07)	.00051* (3.15)	.000064** (3.84)	-232.6* (-8.61)	.91	1.78	40.57**
2. Nonwhite Males, 15-24[4]	--	50.26+ (1.99)	-.02 (-1.15)	14.74+ (2.23)	.00051 (1.38)	.00011* (2.95)	-419.72** (-6.74)	.79	1.92	16.14**
Suicide Mortality Rate				Residual Plus Constant of Per Capita Income	Total Unemployment Rate					
1. Nonwhite Males, 15-24[4]	--	-12.41** (-5.93)	.0054** (12.69)	.0068 (1.42)	42.52+ (1.86)	--	--	.91	1.76	82.02**
Rate of State and County Mental Hospital Residents				Ratio Youth Unemployment Rate to Total Unemployment Rate	Total Unemployment Rate, Lag 3	Percent Population Ages 15-24	Residual of Total Youth Arrest Rate Regressed on Ratio of Youth Unemployment Rate to Total Unemployment Rate			
1. Ages 15-24[4]		98.01* (2.84)	-.05* (-3.01)	63.19* (2.74)	239.21+ (2.13)	-19.15 (-.09)	.48+ (2.17)	.87	1.94	25.69**

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[1] Cochrane-Orcutt transformation used in order to minimize residual autoregression

[2] t-statistic and F-Statistic: significance at the .001 level = **, .01 level = *, .05 level = +

[3] Per 100,000 population

[4] Ordinary least squares regression

TABLE 2

KEY MULTIPLE REGRESSION EQUATIONS[1] OF NATIONAL ECONOMIC INDICES ON ARREST RATES OF YOUTHS[2,3]

(1948-1976)

Youth Arrest Rates	Ages	RHO[1]	Constant	11-Year Moving Average of Per Capita Income	Ratio Youth Unemployment Rate to Total Unemployment Rate	Youth Unemployment Rate, Annual Changes		Binary Variable (1952-1976)	R^2	D.W.	F-Statistic
1. Assault	15-19	.09 (.47)	-2.53** (-7.41)	.00098** (19.83)	.44+ (2.30)	2.54+ (2.23)		-.61** (-5.63)	.96	1.53	131.38**
	20-24	.33+ (1.88)	-2.92** (-6.03)	.0012** (17.09)	.57+ (2.17)	.75 (.63)		-.99** (-6.21)	.96	2.10	158.18**
2. Criminal Homicide	15-19	.29 (1.62)	-.32** (-9.26)	.000084** (16.61)	.094** (5.09)	.17+ (1.95)		-.059** (-5.24)	.97	1.90	166.79**
	20-24	-.21 (-1.15)	-.56** (-14.26)	.00013** (23.77)	.19** (8.69)	.12 (.71)		-.12** (10.00)	.96	1.95	143.48**
3. Auto Theft	15-19	.90** (11.08)	1.11 (.35)	-.000010 (-.01)	1.59+ (1.91)	3.54 (1.56)		-1.11+ (-2.19)	.94	2.60	84.00**
	20-24	.86** (8.74)	-1.26 (-1.48)	.00041+ (2.14)	.69+ (2.48)	1.09 (1.41)		-.63** (-3.61)	.94	2.33	93.58**
4. Robbery	15-19	.13 (.72)	-3.11** (-9.98)	.0012** (26.10)	.38+ (2.23)	2.74* (2.79)		-.46** (-4.04)	.98	1.78	263.09**
	20-24	.19 (1.03)	-3.01** (-8.22)	.00097** (18.22)	.72** (3.58)	2.17+ (2.00)		-.61** (-5.16)	.96	1.89	146.29
					(1947-1976)						
5. Forcible Rape	15-19	.17 (.90)	-.29** (-4.91)	.00010** (11.60)	.14** (4.32)	--		-.14** (-8.08)	.91	1.94	80.94**
	20-24	.30+ (1.71)	-.41** (-4.82)	.00015** (11.83)	.17** (3.76)	--		-.21** (-8.46)	.93	2.05	108.01**
6. Prostitution	20-24	.51* (3.16)	-2.84** (-4.78)	.00066** (6.85)	.86* (2.81)	--		-.11 (-.59)	.92	1.79	96.52**
						Percent Population Ages 15-24					
7. Total Arrests[4]	15-24	--	-92.40** (-4.95)	.063** (13.64)	21.43* (3.16)	-578.53** (-4.34)		-10.47* (-2.73)	.98	1.57	277.86**
					(1953-1975)						
							Rate of Hepatitis Cases Reported	Rate of State and County Mental Hospital Residents Ages 15-24			
8. Narcotics	15-19	.53* (2.93)	-17.53** (-4.31)	.002+ (2.11)	3.21+ (2.43)	76.42+ (2.47)	5.64* (2.61)	-8.21** (-3.68)	.99	1.73	271.58**
	15-24	.61* (3.62)	-15.62** (-4.03)	.003* (2.76)	2.49+ (1.99)	57.15+ (2.01)	5.41* (2.67)	-7.66* (-3.59)	.99	1.64	305.45**

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[1] Cochrane-Orcutt transformation used in order to minimize residual autoregression

[2] t-statistic and F-statistic: significance at the .001 level = **; .01 level = *; .05 level +

[3] Per 100,000 population

[4] Ordinary least squares regression

TABLE 3

KEY MULTIPLE REGRESSION EQUATIONS[I] OF NATIONAL ECONOMIC INDICES ON CRIMES KNOWN TO THE POLICE, RATES BY OFFENCE[2,3]

(1948-1976)

Rate of Crimes Known	RHO[1]	Constant	11-Year Moving Average of Per Capita Income	Ratio Youth Unemployment Rate to Total Unemployment Rate	Youth Unemployment Rate, Annual Changes	Percent Population Ages 15-24	Level of Law Enforcement Personnel, Lag 1	Inflation	R^2	D.W.	F-Statistic
1. Aggravated Assault	.88** (9.72)	-319.38** (-6.15)	.10** (6.46)	25.08+ (1.99)	36.19 (1.11)	687.59+ (2.36)	2.16 (.13)	-32.67 (-.79)	.996	1.82	806.95**
2. Manslaughter	.20 (1.06)	-2.39+ (-2.21)	-.00082** (-3.53)	2.36** (7.20)	-1.02 (-.73)	16.64* (2.87)	.44 (.79)	.087 (.05)	.81	2.02	15.35**
3. Murder	.84** (8.23)	-15.26** (-3.98)	.0021+ (1.92)	2.79* (2.92)	2.72 (1.10)	39.03+ (1.77)	1.64 (1.33)	.37 (.12)	.98	1.52	182.32**
4. Forcible Rape	.91** (11.36)	-63.62* (-3.31)	.01+ (1.97)	9.00+ (2.29)	-3.86 (-.39)	65.52 (.72)	7.66 (1.54)	-3.42 (.27)	.97	2.05	103.95**
5. Auto Theft	.84** (8.30)	-943.69** (-3.88)	.11 (1.64)	197.02* (3.26)	142.37 (.91)	2,395.55+ (1.72)	95.88 (1.23)	187.69 (.94)	.99	1.42	245.92**
6. Robbery	.72** (5.43)	-576.45** (2.31)	.07+ (2.31)	61.05+ (1.91)	214.64+ (2.45)	2,135.02* (3.02)	22.85 (.53)	78.56 (.69)	.99	1.53	245.03**
7. Burglary	.15 (.81)	-2,173.96** (-9.11)	.54** (10.59)	163.09+ (2.25)	1,048.47* (3.24)	7,069.91** (5.55)	-57.44 (-.46)	954.99+ (2.36)	.995	1.77	702.26**

[1] Cochrane-Orcutt transformation used in order to minimize residual autoregression

[2] t-statistic and F-Statistic: significance at the .001 level = **; .01 level = *; .05 level = +

[3] Per 100,000 population

APPENDIX I

Regression Equations Describing the Relations Between Economic Indicators and Measures of Social Cost: Detailed Tables

TABLE I.1

MULTIPLE REGRESSION EQUATIONS[1] OF NATIONAL ECONOMIC INDICES ON U.S. HOMICIDE BY AGE, SEX, AND RACE[2,3]

(1950-1976)

Homicide Rates	RHO[1]	Constant	11-Year Moving Average of Per Capita Income	Ratio Youth Unemployment Rate to Total Unemployment Rate	Percent Population 15-24 Years of Age	Rate of Youth Narcotics Arrests, Lag 2	R^2	D.W.	F-Statistic
All Ages									
1. Total	.26 (1.40)	-13.48** (-6.89)	.00089+ (1.92)	1.93* (3.02)	78.85** (5.87)	—	.97	1.83	284.07**
2. Males[4]	—	-23.46** (-9.18)	.00066 (1.10)	3.66** (3.96)	155.69** (8.86)	—	.97	1.67	283.60**
3. Females[4]	—	-2.54* (-2.94)	.00056* (2.76)	.051 (.16)	33.46** (3.93)	—	.94	1.65	121.87**
4. Whites	.49* (2.87)	-1.73 (-1.35)	.00087* (3.13)	.54 (1.65)	5.45 (.58)	.19* (3.30)	.99	1.67	401.64**
5. White Males	.56* (3.46)	-4.10+ (-1.99)	.0012* (2.62)	1.03+ (2.02,	15.95 (1.10)	.30* (3.37)	.99	1.38	431.35**
6. White Females[4]	—	-.05 (-.08)	.00049** (3.94)	-.07 (-.38)	3.13 (.49)	.06+ (2.11)	.97	1.73	180.23**
7. Nonwhites	.78** (6.42)	-33.33* (-2.75)	.0064 (1.62)	9.93* (3.01)	126.49 (1.39)	—	.95	1.45	143.42**
8. Nonwhite Males	.79** (6.49)	-66.34* (-3.01)	.011 (1.55)	18.44* (3.10)	243.85 (1.48)	—	.95	1.45	147.93**
9. Nonwhite Females	.26 (1.38)	-8.07+ (-2.39)	-.00052 (-.61)	2.51+ (2.11)	100.79** (4.02)	—	.89	1.99	58.35**
Ages 15-24									
1. Total	.67** (4.57)	-7.13 (-1.46)	.0019 (1.56)	3.28* (2.86)	8.76 (.26)	.53* (2.53)	.98	1.80	215.94**
2. Males	.79** (6.66)	-14.54 (-1.71)	.0042+ (1.77)	5.40* (3.06)	5.23 (.10)	.71+ (2.11)	.98	1.41	236.86**
3. Females	.51* (3.04)	-.18 (.09)	.0051 (1.16)	.67 (1.33)	1.38 (.094)	.28* (3.14)	.97	1.69	177.52
4. Whites	.54* (3.24)	-1.99 (-1.02)	.0013* (2.94)	1.15+ (2.36)	-8.29 (-.56)	.37** (4.33)	.99	1.91	397.63**
5. White Males	.60** (3.79)	-4.73 (-1.44)	.0023* (2.98)	1.81+ (2.25)	-9.18 (-.39)	.47* (3.33)	.98	1.88	333.03**
6. White Females[4]	—	1.82 (.90)	.00061 (1.[illegible])	.12 (.19)	-16.22 (-1.11)	.24* (2.39)	.80	2.05	42.16**
7. Nonwhites	.77** (6.09)	-52.72+ (-2.45)	[illegible] (1.47)	14.43* (2.39)	169.04 (1.02)	—	.94	1.41	112.89**
8. Nonwhite Males	.76** (6.00)	-105.43* (-2.61)	.02 (1.23)	29.74* (2.62)	337.46 (1.08)	—	.93	1.46	101.13**
9. Nonwhite Females	.72** (5.25)	-4.75 (-.64)	.0035 (1.50)	.85 (.39)	36.59 (.62)	—	.89	1.47	62.16**

[1] Cochrane-Orcutt transformation used in order to minimize residual autoregression

[2] t-statistic and F-statistic: significance at the .001 level = **; .01 level = *; .05 level = +.

[3] Per 100,000 population

[4] Ordinary least squares regression

TABLE I.2

ORDINARY LEAST SQUARE EQUATIONS OF NATIONAL ECONOMIC INDICES ON THE MOTOR VEHICLE ACCIDENT MORTALITY RATES OF YOUTHS AGES 15-24 BY RACE AND SEX[1,2]

(1950-1976)

Motor Vehicle Accident Mortality Rates	Constant	11-Year Moving Average of Per Capita Income	Motor Vehicle Registration	Annual Changes in Miles Traveled	Total Unemployment Rate	Ratio Male Youth Unemployment Rate to Total Unemployment Rate	R^2	D.W.	F-Statistic
Youths (Ages 15-24 Yrs.)									
1. Total	41.27** (3.76)	-.01+ (-2.14)	.00051* (3.15)	.000065** (3.84)	-232.6** (-8.61)	5.95+ (2.07)	.91	1.78	40.57**
2. Males	67.50** (3.76)	-.02+ (-1.82)	.00068* (2.56)	.000085* (3.09)	-360.09** (-8.15)	9.38+ (2.00)	.87	1.67	28.09**
3. Females	12.80+ (2.20)	-.0054+ (-1.75)	.00028* (3.23)	.000045** (5.09)	-118.47** (-8.28)	2.84+ (1.87)	.94	1.75	68.85**
4. Whites	42.26** (4.02)	-.01+ (-2.31)	.00055** (3.53)	.000064** (3.95)	-224.92** (-8.69)	5.26+ (1.91)	.92	1.75	50.20**
5. White Males	68.99** (3.99)	-.018+ (-1.91)	.00071* (2.76)	.000080* (3.01)	-346.83** (-8.14)	8.82+ (1.95)	.88	1.60	30.99**
6. White Females	11.93+ (2.02)	-.0058 (-1.83)	.00030* (3.46)	.000047** (5.17)	-114.97** (-7.91)	3.13+ (2.03)	.95	1.83	79.83**
7. Nonwhites	36.04+ (2.34)	-.01 (-1.36)	.00038 (1.66)	.000074* (3.14)	-270.19** (-7.11)	7.28+ (1.80)	.80	1.87	17.18**
8. Nonwhite Males	50.26+ (1.99)	-.02 (-1.15)	.00051 (1.38)	.00011* (2.95)	-419.719** (-6.74)	14.74+ (2.23)	.79	1.92	16.14**
9. Nonwhite Females	17.12+ (1.83)	-.0020 (-.39)	.000091 (.71)	.000036+ (2.49)	-137.50** (-5.98)	.49 (.20)	.72	2.30	10.36**

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[1] t-statistic and F-statistic: significance at the .001 level = **; .01 level = *; .05 level = +

[2] Per 100,000 population

TABLE I.3

MULTIPLE REGRESSION EQUATIONS[1] OF NATIONAL ECONOMIC INDICES ON SUICIDE MORTALITY RATES BY RACE AND SEX AND BY AGES 15-24, RACE AND SEX[2]

(1950-1976)

Suicide Mortality	RHO[1]	Constant	11-Year Moving Average of Per Capita Income	Residual Plus Constant of Per Capita Income	Total Unemployment Rate	R²	D.W.	F-Statistic
All Ages								
1. Total	.25 (1.30)	6.54** (13.13)	.001[illegible]** (10.07)	.000050 (.05)	12.91+ (2.48)	.93	2.46	94.70**
2. Males	.43+ (2.44)	11.93** (11.63)	.0010** (3.80)	.00020 (.10)	27.40* (2.89)	.82	2.30	32.38**
3. Females	.54* (3.31)	.73 (1.01)	.0015** (7.80)	-.00014 (-.12)	-.86 (-.15)	.93	1.87	104.23**
4. Whites	.23 (1.19)	7.30** (14.58)	.0012** (10.60)	-.00046 (-.42)	12.58+ (2.38)	.93	2.34	100.44**
5. White Males	.46* (2.61)	12.99** (13.30)	.0010** (3.93)	.00014 (.07)	29.37* (3.[illegible]2)	.84	2.08	37.91**
6. White Females	.62** (4.02)	.96 (1.11)	.0016** (6.70)	-.00081 (-.66)	1.23 (.20)	.94	1.84	110.61**
7. Nonwhites	.32 (1.71)	-.37 (-.77)	.0016** (13.59)	-.00040 (-.41)	9.05+ (1.89)	.96	2.13	182.14**
8. Nonwhite Males[3]		-.07 (-.09)	.0020** (11.79)	.0010 (.55)	27.71* (3.05)	.92	1.56	82.90**
9. Nonwhite Females	.96** (17.83)	4.53+ (1.84)	—	(% Population 15-24) 15.71 (1.00)	8.37+ (1.79)	.93	2.60	158.18**
[illegible] 15-24								
10. Total	.58** (3.61)	-7.68** (-6.26)	.0045** (13.24)	-.00019 (-.10)	3.44 (.37)	.98	2.39	321.61**
11. Males	.78** (6.45)	-14.04** (-5.97)	.0073** (10.80)	.0014 (.70)	18.37+ (1.80)	.99	1.99	610.04**
12. Females	.39+ (2.16)	-2.10** (-3.75)	.0018** (12.95)	-.0014 (-1.30)	-4.53 (-.85)	.96	2.06	164.17**
13. Whites	.74** (5.62)	-8.56** (-6.58)	.0048** (12.75)	-.00030 (-.22)	7.32 (1.11)	.99	2.12	625.97**
14. White Males	.78** (6.30)	-14.48** (-5.56)	.0076** (10.12)	.0012 (.49)	16.92 (1.45)	.99	2.04	498.39**
15. White Females	.35+ (1.88)	-1.99** (-4.03)	.0019** (15.05)	-.0017+ (-1.75)	-5.17 (-1.06)	.96	2.20	199.16**
16. Nonwhites[3]		-7.51** (-5.02)	.0038** (12.58)	.0021 (.61)	9.99 (.61)	.90	1.59	72.65**
17. Nonwhite Males[3]		-12.41** (-5.93)	.0054** (12.69)	.0068 (1.42)	42.52+ (1.86)	.91	1.76	82.02**
18. Nonwhite Females[3]		-2.56+ (-2.14)	.0020** (8.33)	-.00022 (-.08)	-17.14 (-1.31)	.78	1.56	26.41**

[1] Cochrane-Orcutt transformation used in order to minimize residual autoregression

[2] t-statistic and F-statistic: significance at the .001 level = **; .01 level = *; .05 level = +

[3] Ordinary least squares equation

TABLE I.4

MULTIPLE REGRESSION EQUATION OF NATIONAL ECONOMIC INDICES ON THE RATE OF STATE AND COUNTY MENTAL HOSPITAL RESIDENTS, AGES 15-24[1,2]

(1950-1975)

Constant	98.01* (2.84)
11-Year Moving Average of Per Capita Income	-.05* (-3.01)
Percent Population, Ages 15-24	-19.15 (-.09)
Total Unemployment Rate, Lag 3	239.21+ (2.13)
Ratio Youth Unemployment Rate to Total Unemployment Rate	63.19* (2.74)
Residual of Total Youth Arrest Rate Regressed on Ratio of Youth Unemployment Rate to Total Unemployment Rate	.48+ (2.17)
	.87
D.W.	1.94
F-Statistic	25.69**

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[1] t-statistic and F-statistic: significance at .001 level = **; .01 level = *; .05 level = +

[2] Per 100,000 population

TABLE I.5

MULTIPLE REGRESSION EQUATION OF NATIONAL ECONOMIC INDICES ON TOTAL ARREST RATE OF YOUTHS AGES 15-24[1,2]

(1947-1976)

Constant	-92.40** (-4.95)
11-Year Moving Average of Per Capita Income	.063** (13.64)
Percent Population Ages 15-24	-578.53** (-4.34)
Binary Variable 1952-1976	-10.47* (-2.73)
Ratio Youth Unemployment Rate to Total Unemployment Rate	21.43* (3.16)
R^2	.98
D.W.	1.57
F-Statistic	277.858**

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[1] t-statistic and F-Statistic: significance at the .001 level = **; .01 level = *; .05 level = +

[2] Per 1,000 population

TABLE I.6

MULTIPLE REGRESSION EQUATIONS[1] OF NATIONAL ECONOMIC INDICES ON YOUTH NARCOTICS ARREST RATES[2,3]

(1953-1975)

Youth Narcotics Arrest Rates	RHO[1]	Constant	11-Year Moving Average of Per Capita Income	Rate of Hepatitis Cases Reported	Percent Population Ages 15-24	Rate of State and County Mental Hospital Residents, Ages 15-24	Ratio Youth Unemployment Rate to Total Unemployment Rate	R^2	D.W.	F-Statistic
Age Group										
15-24 Years	.61*	-15.62**	.003*	5.41*	57.15+	-7.66*	2.49+	.99	1.64	305.45**
	(3.62)	(-4.03)	(2.76)	(2.67)	(2.01)	(-3.59)	(1.99)			
15-19 Years	.53*	-17.53**	.002+	5.64*	76.42+	-8.21**	3.21+	.99	1.73	271.58**
	(2.93)	(-4.31)	(2.11)	(2.61)	(2.47)	(-3.68)	(2.43)			

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[1] Cochrane-Orcutt transformation used in order to minimize residual autoregression

[2] t-statistic and F-Statistic: significance at the .001 level = **; .01 level = *; .05 level = +

[3] Per 1,000 population

TABLE I.7

MULTIPLE REGRESSION EQUATIONS[1] OF NATIONAL ECONOMIC INDICES ON ARREST RATES OF YOUTHS AGES 15-19 BY OFFENCE[2,3]

(1947-1976)

Youth Arrest Rates	RHO[1]	Constant	11-Year Moving Average of Per Capita Income	Binary Variable (1952-1976)	Ratio Youth Unemployment Rate to Total Unemployment Rate	Youth Unemployment Rate, Annual Changes	R^2	D.W.	F-Statisti
Offence									
1. Prostitution	.40+ (2.36)	-.39** (-4.05)	.00023** (15.96)	.03 (.90)	-.081 (-1.59)	--	.97	1.95	247.00**
2. Forcible Rape	.17 (.90)	-.29** (-4.91)	.00010** (11.60)	-.14** (-8.08)	.14 ** (4.32)	--	.91	1.94	80.94**
					Youth Unemployment Rate				
3. Burglary	.58** (3.84)	-8.84** (-8.20)	.0039** (10.83)	-.54 (-1.11)	11.93+ (2.43)	--	.97	2.01	268.01**
4. Larceny and Theft	.62** (4.25)	- 16.88** (-9.18)	.0071** (11.89)	-.40 (-.52)	18.90* (2.50)	--	.98	1.80	380.00**
5. Crimes Against Family and Children	.67** (4.85)	-.30** (-4.16)	.00013** (5.63)	.03 (1.17)	.51+ (2.00)	--	.94	1.82	130.41**
6. Forgery	.71** (5.39)	-.54** (-4.36)	.0025** (6.53)	-.06 (-1.32)	.75+ (1.90)	--	.95	2.13	172.91**
				1948-1976					
					Ratio Youth Unemployment Rate to Total Unemployment Rate				
7. Auto Theft	.90** (11.08)	1.11 (.35)	-.000010 (-.01)	-1.11+ (-2.19)	1.59+ (1.91)	3.54 (1.56)	.94	2.60	84.00**
8. Robbery	.13 (.72)	-3.11** (-9.98)	.0012** (26.10)	-.46** (-4.04)	.38+ (2.23)	2.74* (2.79)	.98	1.78	263.09**
9. Criminal Homicide	.29 (1.62)	-.32** (-9.26)	.000084** (16.61)	-.059** (-5.24)	.094** (5.09)	.17+ (1.95)	.97	1.90	166.79**
10. Assault	.09 (.47)	-2.53** (-7.41)	.00098** (19.83)	-.61** (-5.63)	.44+ (2.30)	2.54+ (2.23)	.96	1.53	131.38**

[1] Cochrane-Orcutt transformation used in order to minimize residual autoregression

[2] t-statistic and F-statistic: significance at the .001 level = **, .01 level = *, .05 level = +

[3] Per 1 population

TABLE I.8

MULTIPLE REGRESSION EQUATIONS[1] OF NATIONAL ECONOMIC INDICES ON ARREST RATES OF YOUTHS AGES 20-24 BY OFFENCE[2,3]

(1947-1976)

Youth Arrest Rates	RHO[1]	Constant	11-Year Moving Average of Per Capita Income	Binary Variable (1952-1976)	Ratio Youth Unemployment Rate to Total Unemployment Rate	Youth Unemployment Rate, Annual Changes	R^2	D.W.	F-Statistic
Offence									
1. Prostitution	.51* (3.16)	-2.84** (-4.78)	.00066** (6.85)	-.11 (-.59)	.86* (2.81)	--	.92	1.79	96.52**
2. Forcible Rape	.30+ (1.71)	-.41** (-4.82)	.00015** (11.83)	-.21** (-8.46)	.17** (3.76)	--	.93	2.05	108.01**
					Youth Unemployment Rate				
3. Burglary	.78** (6.74)	-3.54 (-2.96)	.0018** (5.13)	-.71+ (-2.24)	6.46+ (2.29)	--	.96	2.07	177.55**
4. Larceny and Theft	.35+ (2.02)	-10.07** (-16.72)	.0044** (19.79)	-1.20** (-3.61)	10.41* (2.54)	--	.98	1.78	405.32**
5. Crimes Against Family and Children	.91** (12.16)	.85 (.94)	-.0000031 (-.0013)	-.14 (-1.30)	.67 (.72)	--	.89	1.52	66.97**
6. Forgery	.80** (7.18)	-.84** (-2.75)	.00042** (4.69)	-.13+ (-1.78)	1.55+ (2.34)	--	.96	2.14	180.89**
1948-1976									
					Ratio Youth Unemployment Rate to Total Unemployment Rate				
7. Auto Theft	.86** (8.74)	-1.26 (-1.48)	.00041+ (2.14)	-.63** (-3.61)	.69+ (2.48)	1.09 (1.41)	.94	2.33	93.58**
8. Robbery	.19 (1.03)	-3.01** (-8.22)	.00097** (18.22)	-.61** (-5.16)	.72** (3.58)	2.17+ (2.00)	.96	1.89	146.29**
9. Criminal Homicide	-.21 (-1.15)	-.56** (-14.26)	.00013** (23.77)	-.12** (-10.00)	.19** (8.69)	.12 (.71)	.96	1.95	143.48**
10. Assault	.33+ (1.88)	-2.92** (-6.03)	.0012** (17.09)	-.99** (-6.21)	.57+ (2.17)	.75 (.63)	.96	2.10	158.18**

[1] Cochrane-Orcutt transformation used to minimize residual autoregression

[2] t-statistic and F-statistic: significance at .001 level = **, .01 level .05 level = +

[3] Per 1,000 population

TABLE I.9

MULTIPLE REGRESSION EQUATIONS OF NATIONAL ECONOMIC INDICES

ON CRIMES KNOWN TO THE POLICE,

RATES BY OFFENCE[2,3]

(1948-1976)

Rate Crimes Known to the Police	RHO[1]	Constant	11-Year Moving Average of Per Capita Income	Percent Population Ages 15-24	Level of Law Enforcement Personnel, Lag 1	Ratio Youth Unemployment Rate to Total Unemployment Rate	Youth Unemployment Rate, Annual Changes	Inflation	R^2	D.W.	F-Statistic
1. Murder	.84** (8.23)	-15.26** (-3.98)	.0021+ (1.92)	39.03+ (1.77)	1.64 (1.33)	2.79* (2.92)	2.72 (1.10)	.37 (.12)	.98	1.52	182.32**
2. Manslaughter	.20 (1.06)	-2.39+ (-2.21)	-.00082** (-3.53)	16.64* (2.87)	.44 (.79)	2.36** (7.20)	-1.02 (-.73)	.087 (.05)	.81	2.02	15.35**
3. Forcible Rape	.91** (11.36)	-63.62* (-3.31)	.01+ (1.97)	65.52 (.72)	7.66 (1.54)	9.00+ (2.29)	-3.86 (-.39)	-3.42 (.27)	.97	2.05	103.95**
4. Robbery	.72** (5.43)	-576.45** (-5.06)	.07+ (2.31)	2,135.02* (3.02)	22.85 (.53)	61.05+ (1.91)	214.64+ (2.45)	78.56 (.69)	.99	1.53	245.03**
5. Aggravated Assault	.88** (9.72)	-319.38** (-6.15)	.10** (6.46)	687.59+ (2.36)	2.16 (.13)	25.08+ (1.99)	36.19 (1.11)	-32.67 (-.79)	.996	1.82	806.95**
6. Burglary	.15 (.81)	-2,173.96** (-9.11)	.54** (10.59)	7,069.91** (5.55)	-57.44 (-.46)	163.09+ (2.25)	[illegible],048.47* (3.24)	954.99+ (2.36)	.995	1.77	702.26**
7. Larceny & Theft	.46* (2.72)	-2,052.43+ (-2.40)	1.28** (6.57)	5,683.69 (1.16)	-314.91 (-.82)	-175.60 (-.69)	1,287.91 (1.52)	1,244.98 1.12	.99	1.39	233.24**
8. Auto Theft	.84** (8.30)	-943.69** (-3.88)	.11 (1.64)	2,395.55+ (1.72)	95.88 (1.23)	197.02* (3.26)	142.37 (.91)	187.69 (.94)	.99	1.42	245.92**

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[1] Cochrane-Orcutt transformation used in order to minimize residual autoregression

[2] t-statistic and F-statistic: significance at the .001 level = **; .01 level = *; .05 level = +

[3] Per 100,000 population

TABLE I.10

ORDINARY LEAST SQUARES EQUATIONS OF NATIONAL ECONOMIC INDICES ON PERCENT ATTENDING COLLEGE AND PROFESSIONAL SCHOOL BY SEX[1]

(1948-1976)

Percent Ages 18-24 Attending College and Professional School	Constant	11-Year Moving Average of Per Capita Income	Total Unemployment Rate	Ratio Youth Unemployment Rate to Total Unemployment Rate	R^2	D.W.	F-Statistic
Sex							
1. Male	-48.67** (-8.47)	.0037** (4.25)	125.18* (3.36)	27.48** (9.48)	.93	1.68	104.40**
2. Female	-31.49** (-8.88)	.0085** (15.96)	52.33+ (2.28)	8.41** (4.71)	.97	1.59	276.45**

[1] t-statistic and F-statistic: significance at .001 level = **; .01 level = *; .05 level = +

TABLE I.11

MULTIPLE REGRESSION EQUATIONS[1] OF NATIONAL ECONOMIC INDICES ON THE MALE MILITARY PERSONNEL RATE[2,3]

(1956-1976)

Male Military Personnel	RHO[1]	Constant	11-Year Moving Average of Per Capita Income	Residual Plus Constant of Per Capita Income	Dummy Variable (1967-1973)	Ratio Youth Unemployment Rate to Total Unemployment Rate	R^2	D.W.	F-Statistic
Age Group									
1. All Ages	.17* (3.61)	.02 (1.38)	-.000064* (-2.91)	-.0000084 (-.90)	-.0028 (1.61)	.01* (2.96)	.89	1.52	31.37**
2. 20-24 Years	.16** (4.49)	.13 (.86)	-.000069* (-2.65)	-.000096 (-1.11)	.03+ (2.08)	.13* (2.76)	.91	1.34	37.66**
3. 17-24 Years	.17** (3.98)	.13 (1.57)	-.000045* (-3.18)	-.000050 (-.92)	.02+ (1.96)	.06+ (2.01)	.90	1.39	33.97**

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[1] Cochrane-Orcutt transformation used in order to minimize residual autoregression

[2] t-statistic and F-statistic: significance at the .001 level = **; .01 level = *; .05 level = +

[3] Rated

TABLE I.12

MULTIPLE REGRESSION EQUATIONS[1] OF NATIONAL ECONOMIC INDICES ON THE BIRTH RATE BY AGE OF MOTHER[2,3]

(1950-1975)

Birth Rates	RHO[1]	Constant	11-Year Moving Average of Per Capita Income	Residual Plus Constant of Per Capita Income Lag 1.	Total Unemployment Rate Lag 1.	Ratio Youth Unemployment Rate to Total Unemployment Rate	R^2	D.W.	F-Statistic
Age of Mother									
1. 10-14 Years[4]		1.22** (4.59)	.00028** (7.61)	-.00064 (-.20)	-3.96+ (-2.12)	-.42** (-3.64)	.76	1.83	16.21**
2. 15-19 Years	.72** (5.23)	178.44** (12.52)	-.02** (-8.94)	.01 (1.15)	-50.78 (-.94)	-12.22* (-2.61)	.97	1.47	193.21**
3. 20-24 Years	.81** (6.89)	614.60** (11.90)	-.11** (-10.13)	-.02 (-.77)	-131.12 (-.85)	-21.98 (-1.58)	.99	1.28	202.50**

[1] Cochrane-Orcutt transformation used in order to minimize residual autoregression

[2] t-statistic and F-statistic: significance at the .001 level = **; .01 level = *; .05 level = +

[3] Live births per 1,000 women

[4] Ordinary least squares equation

APPENDIX II

Detailed Estimates of the Impact of Change in Youth Unemployment Rates on Measures of Social Cost

TABLE II.1

HOMICIDE MORTALITY[1]

		Numerical Rise in Homicides for One Percent Rise in the Youth Unemployment Rate, Assuming that the Total Unemployment Rate Does Not Change		Percent Rise in Homicides for One Percent Rise in the Youth Unemployment Rate, Assuming that the Total Unemployment Rate Does Not Change	
	Group	1970	1975	1970	1975
1.	Total*	800	484	4.75	2.27
2.	Males**	740	445	5.57	2.69
3.	Females	11	7	.31	.14
4.	Whites	195	119	2.50	1.08
5.	White Males+	181	109	3.09	1.33
6.	White Females	-13	-8	-.68	-.28
7.	Nonwhites*	516	326	5.71	3.15
8.	Nonwhite Males*	459	289	6.19	3.47
9.	Nonwhite Females+	68	43	4.16	2.14
	Youths Ages 15-24				
1.	Total*	238	155	5.72	2.82
2.	Males*	193	128	5.80	3.00
3.	Females	24	16	2.97	1.27
4.	Whites+	72	46	4.43	1.78
5.	White Males+	56	37	4.68	1.90
6.	White Females	4	2	.91	.35
7.	Nonwhites*	141	99	5.56	3.42
8.	Nonwhite Males*	141	99	6.60	4.27
9.	Nonwhite Females	4	3	1.06	.53

---

[1] Significance at the .001 level = **; .01 level = *; .05 level = +

TABLE II.2

MOTOR VEHICLE MORTALITY AMONG YOUTHS AGES 15-24[1]

	Group	Numerical Rise in Mortality for One Percent Rise in the Youth Unemployment Rate, Assuming Total Unemployment Rate Does Not Change		Percent Rise in Mortality for One Percent Rise in the Youth Unemployment Rate, Assuming Total Unemployment Rate Does Not Change	
		1970	1975	1970	1975
1.	Total+	518	281	3.10	1.79
2.	Males+	337	222	2.62	1.81
3.	Females+	104	67	2.68	1.94
4.	Whites+	329	211	2.20	1.48
5.	White Males+	274	179	2.39	1.61
6.	White Females+	98	62	2.81	2.00
7	Nonwhites+	71	50	4.03	3.52
8.	Nonwhite Males+	70	49	4.99	4.47
9.	Nonwhite Females	2	2	.67	.55

---

[1] Significance at the .05 level = +

TABLE II.3

SUICIDE MORTALITY[1]

Group	Numerical Rise in Suicides for One Percent Rise in the Total Unemployment Rate		Percent Rise in Suicides for One Percent Rise in the Total Unemployment Rate	
	1970	1975	1970	1975
All Ages				
1. Total+	261	276	1.11	1.02
2. Males*	271	285	1.63	1.45
3. Females	-9	-10	-.13	-.13
4. Whites+	223	234	1.01	.93
5. White Males*	254	266	1.63	1.46
6. White Females	11	12	.17	.17
7. Nonwhites+	23	25	1.62	1.33
8. Nonwhite Males*	34	37	3.26	2.63
9. Nonwhite Females+	11	12	2.89	2.54
Youths Ages 15-24				
1. Total	122	137	3.9	2.9
2. Males+	32	37	1.36	.97
3. Females	-8	-9	-1.08	-.94
4. Whites	22	25	.81	.60
5. White Males	26	29	1.22	.86
6. White Females	-8	-9	-1.23	-1.06
7. Nonwhites	5	6	1.31	1.10
8. Nonwhite Males+	10	12	3.76	2.95
9. Nonwhite Females	4	5	-4.18	-4.39

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[1] Significance at .01 level = *; .05 level = +

TABLE II.4

STATE AND COUNTY MENTAL HOSPITAL RESIDENTS, YOUTHS AGES 15-24

	Numerical Rise in Residents for One Percent Rise in the Youth Unemployment Rate, Assuming the Total Unemployment Rate Does Not Change		Percent Rise in Residents for One Percent Rise in the Youth Unemployment Rate, Assuming the Total Unemployment Rate Does Not Change	
Group	1970	1975	1970	1975
Residents+	3,843	2,563	14.36	12.23

[1] Significance at .05 level = +

TABLE II.5

TOTAL ARRESTS, YOUTHS AGES 15-24[1]

Youths	Numerical Rise in Arrests for One Percent Rise in the Youth Unemployment Rate, Assuming the Total Unemployment Rate Does Not Change		Percent Rise in Arrests for One Percent Rise in the Youth Unemployment Rate, Assuming the Total Unemployment Rate Does Not Change	
	1970	1975	1970	1975
Ages 15-24*	154,967	102,317	5.46	2.66

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[1] Significance at the .01 level = *

TABLE II.6

YOUTH NARCOTICS ARRESTS[1]

	Numerical Rise in Arrests for One Percent Rise in the Youth Unemployment Rate, Assuming the Total Unemployment Rate Does Not Change		Percent Rise in Arrests for One Percent Rise in the Youth Unemployment Rate, Assuming the Total Unemployment Rate Does Not Change	
Age Group	1970	1975	1970	1975
15-24 Years+	18,000	11,855	4.10	3.16
15-19 Years+	12,489	8,649	8.83	4.11

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[1] Significance at the .05 level = +

TABLE II.7

YOUTH ARRESTS[1]

Crime	Age Group	Numerical Rise in Arrests for One Percent Rise in the Youth Unemployment Rate		Percent Rise in Arrests for One Percent Rise in the Youth Unemployment Rate	
		1970	1975	1970	1975
1. Burglary	15-19*	2,277	2,734	1.91	1.28
	20-24+	1,059	1,136	2.14	1.44
2. Larceny and Theft	15-19*	3,613	4,316	1.57	1.18
	20-24*	1,709	1,834	1.86	1.11
3. Crimes Against Family & Children	15-19+	97	117	2.04	1.41
	20-24	109	117	.83	1.05
4. Forgery	15-19+	143	171	1.56	1.24
	20-24+	253	272	1.91	1.54

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[1] Significance at the .01 level = *; .05 level = +

TABLE II.8

YOUTH ARRESTS[1]

Crime	Age Group	Numerical Rise in Arrests for One Percent Rise in the Youth Unemployment Rate, Assuming that the Total Unemployment Rate Does Not Change		Percent Rise in Arrests for One Percent Rise in the Youth Unemployment Rate, Assuming that the Total Unemployment Rate Does Not Change		Numerical Rise in Arrests for One Percent Rise in the Youth Unemployment Rate, Reflected in the Annual Change Variable		Percent Rise in Arrests for One Percent Rise in the Youth Unemployment Rate, Reflected in the Annual Change Variable		Total Numerical Rise in Arrests for One Percent Rise in the Youth Unemployment Rate		Total Percent Rise in Arrests for One Percent Rise in the Youth Unemployment Rate	
		1970	1975	1970	1975	1970	1975	1970	1975	1970	1975	1970	1975
1. Prostitution	20-24*	2,873	1,782	12.02	8.13	--	--	--	--	--	--	--	--
2. Forcible Rape	15-19**	545	377	11.16	6.45	--	--	--	--	--	--	--	--
	20-24**	568	352	12.83	5.84	--	--	--	--	--	--	--	--
3. Auto Theft	15-19+	6,189	4,283	8.78	6.58	--	--	--	--	--	--	--	--
	20-24+	2,306	1,430	11.40	7.40	--	--	--	--	--	--	--	--
4. Robbery	15-19+	1,478	1,023	4.35	1.91	523	627	1.54	1.17	2,001	1,650	5.89	3.08
	20-24**	2,406	1,491	10.09	4.40	--	--	--	--	--	--	--	--
5. Criminal Homicide	15-19+	366	253	12.22	6.70	32	39	1.08	1.03	398	292	13.30	7.73
	20-24+	635	393	17.22	8.05	20	21	.53	.43	655	414	17.75	8.48
6. Assault	15-19+	1,712	1,187	6.73	2.63	483	582	1.90	1.29	2,195	1,769	8.63	3.92
	20-24+	1,905	1,180	7.24	2.65	--	--	--	--	--	--	--	--

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[1] Significance at .001 level = **; .01 level = *; .05 level = +

TABLE II.9

CRIMES KNOWN TO THE POLICE[1]

Crime	Numerical Rise in Crimes Known for One Percent Rise in the Youth Unemployment Rate, Assuming that the Total Unemployment Rate Does Not Change		Percent Rise in Crimes Known for One Percent Rise in the Youth Unemployment Rate, Assuming that the Total Unemployment Rate Does Not Change		Numerical Rise in Crimes Known for One Percent Rise in the Youth Unemployment Rate, Reflected in the Annual Change Variable		Percent Rise in Crimes Known for One Percent Rise in the Youth Unemployment Rate, Reflected in the Annual Change Variable		Total Numerical Rise in Crimes Known for One Percent Rise in the Youth Unemployment Rate		Total Percent Rise in Crimes Known for One Percent Rise in the Youth Unemployment Rate	
	1970	1976	1970	1976	1970	1976	1970	1976	1970	1976	1970	1976
1. Murder*	693	495	6.12	3.66	--	--	--	--	--	--	--	--
2. Manslaughter**	575	418	12.96	11.30	--	--	--	--	--	--	--	--
3. Forcible Rape+	2,227	1,598	8.20	3.79	--	--	--	--	--	--	--	--
4. Robbery+	15,102	10,851	4.71	2.87	2,597	2,949	.81	.78	17,699	13,800	5.52	3.65
5. Aggravated Assault+	6,217	4,480	2.50	1.24	--	--	--	--	--	--	--	--
6. Burglary +	40,386	28,974	2.47	1.28	1,962	2,264	.12	.10	42,346	31,238	2.59	1.38
7. Auto Theft*	48,760	35,056	6.21	4.47	--	--	--	--	--	--	--	--

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[1] Significance at .001 level = **, .01 level = *, .05 level = +

TABLE II.10

COLLEGE AND PROFESSIONAL SCHOOL ATTENDANCE[1]

	Numerical Rise in Attendance for One Percent Rise in the Youth Unemployment Rate, Assuming Total Unemployment Rate Does Not Change		Percent Rise in Attendance for One Percent Rise in the Youth Unemployment Rate, Assuming Total Unemployment Rate Does Not Change	
Sex	**1970**	**1975**	**1970**	**1975**
Male*	568,935	406,969	17.08	11.02
Female**	206,332	134,260	8.34	4.14

Significance at the .01 level = *; .001 level = **

TABLE II.11

MALE MILITARY PERSONNEL RATE[1]

	Numerical Rise in Male Military Personnel for One Percent Rise in the Youth Unemployment Rate, Assuming that the Total Unemployment Rate Does Not Change		Percent Rise in Male Military Personnel for One Percent Rise in the Youth Unemployment Rate, Assuming that the Total Unemployment Rate Does Not Change	
Age Group	1970	1975	1970	1975
Total*	201,768	123,152	6.67	6.13
17-24*	214,970	150,449	9.25	13.64
20-24+	209,966	148,416	10.97	19.71

[1] Significance at the .01 level = *; .05 level = +

TABLE II.12

BIRTHS[1]

	Numerical Change in Births for One Percent Rise in the Youth Unemployment Rate, Assuming the Total Unemployment Rate Does Not Change		Percent Change in Births for One Percent Rise in the Youth Unemployment Rate, Assuming the Total Unemployment Rate Does Not Change	
Age Group	1970	1975	1970	1975
10-14**	-839	-480	-7.14	-3.80
15-19*	-23,532	-14,847	-3.65	-2.55
20-24*	-37,884	-24,608	-2.67	-2.25

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[1] Significance at the .001 level = **; .01 level = *

YOUTH VIEWS

Report by the
National Football League
Players Association

The last to be heard in youth employment policy deliberations are youth themselves, to a large extent because they lack formalized institutional mechanisms to represent their interests. In order to solicit youth views without filtering them through the interpretative framework of social scientists, the Vice President's Task Force on Youth Employment utilized 25 National Football League players to interview 211 young people enrolled in a cross-section of youth employment and training programs in 16 major sites. The results are as follows:

1. Demographics

The interviewed youth are representative of participants in CETA youth programs. As a group, they are predominantly black, male, over the age of 17, and at the grade 11 level or higher. Males in the sample are found in disproportion among younger enrollees. Sixty-three percent of those under 18 are males, whereas the sex composition of those 18 and over is more evenly divided--52 percent male, 48 percent female.

Over three-quarters of the sample group represents minority populations. This reflects quite accurately the urban, economically depressed loci of most YEDPA programs. It should be noted, however, that because all interviewing was conducted in major metropolitan areas, the significant number of rural projects in existence are not represented.

Demographic Profile of Respondents

	Percent (100)
Age	
16 or under	18
17	23
18	29
19	18
20 or over	10
(Missing Observations)	1
Schooling Completed	
Above Grade 12	16
Grade 12 (or equiv.)	26
Grade 11	24
Grade 10	19
Grade 9 or below	12
Special Education	2
Missing	--

Sex	
Male	56
Female	44
Race	
Black	60
White	22
Hispanic	15
Other	3

2. Activity Prior to Program

The majority of the youth either were enrolled in school (and often working part-time as well) or working in another job just prior to joining a program. Another one-fifth had been, in their words, "doing nothing."

"What were you doing just before you got into the Program?"

	All Respondents (N=211) (%)
In-School; school and work	43
Holding another job	21
Nothing; hanging around	20
Doing "odd jobs"	5
Looking for work, "unemployed"	3
Vocational training, another program	2
Other responses	2
No answer	4

3. Source of Information about Program

Over one-half of the respondents reported that they had heard of the program either from a friend or at school from a teacher or counselor. By contrast, only 1 in 9 learned of the program from a CETA referral or outreach program. The older respondents were more likely to have heard of the program from friends while the younger ones were informed in school.

"How did you find out about the program?"

	Sex			Age	
	All Respondents	Male	Females	Under 18	18+
(Raw)	(211)	(119)	(92)	(87)	(122)
At school, teacher, counselor	28	28	29	41	20
Friends, friend in program	27	25	29	16	34
Newspaper article, ad, TV, Radio Ad, Announcement	9	6	13	8	9
Outreach program, referral center, local career center, CETA	9	9	10	8	11
Mother, father, family	8	7	10	9	7
Employment office, agency	7	10	2	5	8
Probation officer, Courthouse, Corrections	4	7	--	6	2
Other	7	8	5	6	7
No Answer	1	1	1	1	1

4. Job-Experience

Only 29 percent of the young people interviewed reported that the program they werecurrently in represented their first job. There is a predictable, though modest, correlation between age and likelihood of a first-job experience with the younger respondents more likely to cite this as their first job.

"Is this your first job?"

	Yes %	No %
All Respondents	29	71
Under 18	36	64
18 and Over	25	75

Nearly two-fifths of the young people had experienced at least one rejection in previous job searches usually for lack of specific educational or skill requirements. Twenty-five percent of the kids claimed in response to another question that they had actually refused a job offering. Reasons for doing so were dominated by a perception either of the low wages or the menial nature of the work involved. More than one-half of those aged 19 or over have refused a job.

5. Skills from School

Players asked the youth whether they learned "any skills in school that help you in this job." Just over one-half say they did learn such skills; nearly as many claim they did not. The most frequently mentioned helpful skill learned in school was typing, bookkeeping or clerical, though less than one in five cited even these.

Helpful Skills Learned in School

	All Respondents %
Yes, I did learn helpful skills	51
Typing, bookkeeping, clerical	18
Math, sciences	9
Carpentry, woodwork, mechanical, bricklaying	7
Reading, writing skills	6
Other, no specific mentions	10
No, did not	49

6. Effectiveness of Programs

Respondents were first asked if they found the program in which they were enrolled to be more or less helpful than they expected. Over three-fourths rated their program as being more helpful than they had anticipated.

A similarly lopsided answer was recorded when respondents were asked how much they thought they had learned in the program. Four of five said they had learned a lot, while less than one in twenty responded that they had not learned much at all (Table 9).

The responses to both of these questions indicate unmistakably favorable reactions on the part of the youth involved. Their positive outlook is a theme which most players observed throughout the interviewing process. After all, a job--any job--when compared with no job, can be seen as a very positive thing.

7. Best Features

For more than one-quarter of the youth, the total experience, seen largely as an introduction to the world of work, is the most appealing aspect of the programs. On a related note, many youngsters see the programs as a valuable way to meet and learn to deal with people in work environments. Still others discuss the programs' best features in terms of the skills and specific training they afford. These responses, although expressed in their colloquialisms, conform notably to several of the large objectives repeated in so many of the program descriptions: The program values attached by the enrollees do not appear to diverge sharply from those envisioned by planners.

What are the best things about this Program?

	All Respondents %
EXPERIENCE Experience in general; learning about the world of work; lots of learning activities	27
SKILL TRAINING Learning a specific skill; getting skill training on the job	16
MEETING PEOPLE Meeting people, working with others	14
SUPERVISORS The teachers, supervisors; way the program is run; the people running the program	10
TRAINING FOR FUTURE OPPORTUNITY Training for the future; expanding future opportunities	9
PAY The money, paycheck, getting paid	7

	All Respondents %
CONCERN The way I'm treated; individual attention; they care; concern	7
OTHER COMMENTS	6
NO ANSWER, DON'T KNOW	4

8. Negative Features

The first point to be made about negative perceptions of the programs is that fewer respondents offer them. While 96 percent volunteered a favorable impression, only 53 percent could suggest an unfavorable one. This fact itself constitutes a positive finding. Among those who do respond, their comments tend to isolate three or four major areas of concern.

One such area relates to pay. Many feel they are underpaid, and in some cases, being abused financially because of their youthful enrollee status on the job site. While being paid the least, they are asked to do the worst work, especially in menial tasks. Several others complain of administrative delays in receiving paychecks.

Other participants focus on administrative deficiencies in the programs. They "waste time," or "wait around" for meetings, transportation, counselor sessions, and the like.

Small numbers complain of the nature or amount of work they are asked to handle, often in the quid-pro-quo context of what they are being paid for the work. Relatively few acknowledge interpersonal difficulties, with peers or supervisors, and an equally small number bemoan the brief duration of the program in which they are enrolled. Various other comments, ones not easily categorized, are made by a significant minority -- 16 percent -- of respondents. Of these, a handful relate to transportation difficulties.

What are the worst things about this program?

	All Respondents %
NOTHING No "worst things"	29
NOT ENOUGH MONEY Low wages, minimum wage for hard work, not enough hours.	10
ADMINISTRATIVE FAILURE, RED TAPE Disorganized, not enough to do; waste time; red tape; lack of placement.	10
WORK TOO HARD Too much work for the money; doing other people's work.	6
PROGRAM LIMITS Brief duration of program; inaccessibility of program to others	4
PAY DELAY Delays in getting paid; checks come too far apart.	4
INTERPERSONAL PROBLEM	4
VARIOUS OTHER COMMENTS	16
NO ANSWER, DON'T KNOW	18

9. Rules and Discipline

A more structured and disciplined system is an important factor for young people in becoming acclimated to the world of work. Players asked the enrollees about their attitudes on that issue. "Are there too many rules and deadlines in this program?" Only one in seven respondents under age 18 and one in twenty age 18 and over think so. For the vast majority, the rules are viewed as useful and important, both as a means of administering the program or getting the job done, and as a learning device, preparing them for the "real world" of employment. At least at a conceptual level, the respondents reveal a very mature and straightforward acceptance of the need for rules and discipline. It should also be said that in most programs, rules do seem to be limited to those requirements obviously needed for work performance; timeliness, attendance, sobriety, non-possession of any drugs, and so forth. Thus, many respondents are probably correct, in an objective sense, when stating that there are not too many rules.

10. Program Effect on Job Plans

The sample population is almost evenly divided between those whose specific career or job plans have and have not changed since enrollment in a job program. Among those who have not altered their plans, the program has served to strengthen or confirm their earlier inclinations. This is further borne out by the fact that, while less than half have actually changed plans, fully 72 percent claim to "have a better idea" of what they would like to do, since enrolling in a program.

Others who have not altered plans, of course, had no definitive plans to alter in the first place. (Indeed, many of their career preferences expressed by so young and inexperienced a population cannot be viewed as firm, in any case.) For these, responses suggest that program experiences have often clarified certain avenues they do not wish to pursue, even if they have not identified those they may wish to try.

For the nearly half who do claim to have changed (or, presumably, created) plans, their responses often reveal a direct link between the skills or occupation to which the program has exposed them and their new objectives. The spectrum of career interests is wide, reflecting the diversity of programs in which the youngsters are participating. The nature of interest varies from wishful thinking in some cases to fairly realistic appraisals.

11. Perceived Obstacles and Needs

In discussing job aspirations with enrollees, the players turned to the question of particular obstacles or special needs in pursuing goals. Education stands out as the dominant concern in this regard.

What do you need most to reach job goals?

	All Respondents %
EDUCATION Education, school, college, vocational education	54
EXPERIENCE Training, experience, apprenticeship	16
SKILL Specific skill or technique (e.g., learn English)	10
ATTITUDE Change attitude; discipline, more determination	6
MONEY FOR SCHOOL	4
OTHER RESPONSES	5
NOT SURE, NO ANSWER	5

Program participants clearly acknowledge the universal importance placed on educational attainment by our society. Many of them express regret at earlier decisions to curtail their own schooling. Continuing rather than foreclosing further education is, in fact, the only statistically significant answer to the basic question: "What would you do differently to reach job or career goals?"

What would you do differently?

	All Respondents %
MORE EDUCATION More schooling, go to college	11
STAY IN SCHOOL Never drop out, stay in school	9
TRY HARDER IN SCHOOL Try harder, study more	9
JOB PROGRAM Go through program like this earlier, again	4

MORE SERIOUS ATTITUDE Take things more seriously; work harder	3
VOCATIONAL TRAINING	2
OTHER COMMENTS	3
NOTHING Would do nothing differently	3
NO ANSWER, DON'T KNOW	55

Many of these younsters appear to have come face-to-face with their own educational needs and deficiencies, and thus to a more somber appreciation of the role educational achievement plays in expanding employment options. Fortunately, many of them still have time to act on their insights.

12. Future Expectations

Players concluded their conversations with the youth by asking them about their expectations for the future. Not surprisingly, the bast majority exude optimism. They look forward to their future careers and, for the most part, express a kind of blind faith in the capacity of America's economic system to create jobs and continue to offer the rewards of affluence to those who apply their best efforts.

A smaller group, comprising fewer than one-fifth of all respondents, appears more qualified in their appraisal of the future. They tend to express confidence in themselves and their own plans but seem less sanguine about the job prospects for their generation.

Finally, there is a handful of participants who expressed a serious degree of apprehension. The mix of attitudes concerning the future is well reflected by the large selection of verbatim responses in Table 19. As we have seen in other responses, some youth seem to have a realistic projection of themselves, while others appear to mouth sentiments they may think are expected of them.

IMPRESSIONS OF THE PLAYERS

The NFL Players who interviewed the youth in programs gathered a wide range of information and perspective:

1. Program Performance

While they varied in the extent of their enthusiasm, nearly all of the players offered good evaluations of the programs, and more particularly, of the people who run them. Perhaps the findings should be minimized because of the opportunity for directors to prepare for the players and to control, to some extent, what they saw and heard. On the other hand, the players were briefed thoroughly prior to their interviewing, and were very much on the lookout for unresponsive directors and staff, or for serious flaws in the programs.

Bernard Jackson said of the three programs with which he was involved: "All three programs are good, and they're very helpful to the kids." Gerald Irons found that "the majority of programs" in Cleveland "are beneficial to the participants in helping them re-gain self-worth and confidence." Burgess Owens concluded that both of the programs he reviewed in New York City were "very impressive" and "did a good job of introducing youngsters to what work is all about."

As for individual directors with whom they came in contact, many of the players were no less laudatory. Doug Dennison found that the director of a training program for nurses aides in Dallas was "extremely responsive in dealing with the problems of the trainees." Based on their work with two programs in Detroit, Freddie Scott and Charlie Weaver found the supervisors to be "great positive influences." As Weaver said, "the director acted as though the kids were his own."

In St. Louis, Mike Wood found that all secretarial trainees he interviewed in one program "believed very much in Sister Marie," the director. By his own observation, "she really cares what happens to those kids."

While it is true that in a few instances, the players found the directors to be "remote," "too businesslike," or "unresponsive to the kids," the majority of observations are typified by the foregoing comments.

As the comments themselves suggest, the players put a premium on the level of concern of the directors. Most found that the programs which worked best were those which reflected the greatest degree of ongoing, personal concern for the individual welfare of the participants. There is no replacement for this quality.

2. The Participants

On another positive note, many of the players seemed pleasantly surprised by the caliber and motivational level of the youngsters they interviewed. The following series of comments from the players themselves gives a good sense of their reactions to the young people.

> Bernard Jackson: The most impressive thing I found was that all the kinds who had jobs really wanted to work and to continue to work for the independence that gave them.
>
> Doug Dennison: The youth here in Dallas are very positive. They want to be somebody.
>
> Gene Upshaw: All the participants enjoy the program. They all feel they have futures, and they believe there will be a job waiting for them. They still believe in the American dream...they are very alert, and all they want is just a chance.
>
> Tom Jackson: I found out later in my interviews what I considered to be the important point. These kids want to work.
>
> Gerald Irons: Most youth seem to enjoy belonging to a program that wanted them regain a value system that was lost somewhere between elementary and high school. They seemed willing to try to improve their present unskilled position...I found them to be extremely open in discussing their...goals and aspirations.
>
> Freddie Scott: I was surprised at the predominant attitude and sense of pride they associated with their jobs.
>
> Mack Alston: The kids were very enthusiastic, especially in the school/work program.

Mel Pender differed with this general assessment of the kids, at least in the case of one or two of the programs which he reviewed in Atlanta. Mel expressed "disappointment" in the youth and their attitudes and reactions. "They don't appreciate the implications of the decisions they are making in these programs." Referring to an aviation training program, Mel continued:

> The youth in this program showed that they would want to hold positions in the aviation field. I can't help but think that the only reason why they want an aviation profession is because that's the only thing they've been exposed to. Some of these youth are simply not pilot material. And that's called deception.

Mel was also one of two or three players who were distinctly unimpressed by the basic verbal and communications skills possessed by the respondents. In Mel's words, "many students leave school thinking they know how to read or write, and they don't."

3. Suggestions for Improvement

No clear consensus emerged regarding general ideas for improving the programs. Rather, the players' comments tended to reflect divergent views about the nature of the contribution which these programs should make to the lives and careers of the enrollees.

On the one hand, some players seemed to feel that while most of the programs exposed the youth to a variety of career options, they should have focused more on teaching specific, useful skills. On a similar note, Freddie Scott represented the views of several players when he noted that in some programs, little apparent effort is made to link a young person's specific occupational interests with the skill training involved in the job in which he is placed. Dennis Lick, in Chicago, also felt that the job program he reviewed was deficient in that there was little effort to provide or develop formal career directions for the trainees.

On the other hand, several players seemed to view the programs' primary function not so much to steer enrollees into a given field, as to expose them to the world of work and provide them with realistic estimates of the requirements to pursue various careers. As Mel Pender put it: "My advice is that we should seek to expose youth to as many as five or six job experiences during the duration of any one program. This way, a student can really decide which jobs he or she does or does not want to work at.

4. Specific Problems

The players raised a number of specific weaknesses or problems in some of the programs. By far, the most frequently mentioned difficulty was that of funding. A majority of the players were made aware of one or another difficulty in a program's ability to maintain a steady funding flow. The causes of these problems are too numerous and detailed to be discussed here. From most of the players' points of view, the larger point is that the kind of on-going funding problems appear to often cast a shadow of uncertainty and anxiety over entire programs.

Few of the players isolated "dirty" or "dingy" working conditions as a serious problem of a program. Mark Kellar found the attitude of youth in one of the programs he reviewed to be remarkably positive in spite of the harsh conditions. Players find that on issues like these, which reflect the financial limitations imposed on these programs, they can more easily expose the problem than suggest the solution.

Several players suggested that the programs should be planned and designed to give more emphasis right from the start on ancillary services. For example, many respondents told players of their inability to get transportation to and from job locations. They often viewed this as their greatest problem. For others, the need for counseling to go hand-in-hand with the job experience was clearly important. Several players also noted high numbers of teenage mothers among the enrollees, and the related need for day-care centers and other assistance if these younsters are to go back to school or move on to more lucrative job positions.

Several of these observations are captured in a larger view shared by a number of the players that all too often, programs do not appear to be fully oriented to the special needs and concerns of the populations they serve.

In discussing problems or suggesting improvements more closely identified with the actual workaday lives of the young people they interviewed, the players seemed to highlight two issues: wages and supervision. Players found several programs in which youth participants had suffered delays in pay. Players found this to be especially debilitating for the youth, who perhaps are more dependent on the immediate gratification that their pay represents. The players also suggest that the programs seek to develop pay policies no less frequent than twice monthly. Efren Herrera, for example, found that youth in San Diego who were receiving monthly paychecks were finding it extremely difficult to budget their money properly and avoid running out of funds at the end of each monthly cycle.

Several players also identified specific supervision problems. More often than not, these took place not at the administrative center of the job programs, but at remote job sites in which private employers, union representatives, or other outside agents were responsible for supervising the youth. Some players called attention to the general lack of supervision and apparent interest being expressed in the youth's work. In other situations, players found the possibility that some of the young enrollees were being abused or overworked. Tony McGee and Richard Bishop thought this was the case at one construction site for an on-the-job training program in Boston. As McGee pointed out, "There is a need for a continuing monitoring of work-sites by those representing the program."

5. Overall Perspectives

On their final report forms, players were asked for any concluding remarks or comments they might have had about their experience. A handful of their responses are recounted verbatim here as typical expressions of what most of the players said in their post-interview telephone reports.

> Tom Jackson: I would like to say that the interviews, for me, generated a new interest in today's youth. Unlike what I thought I would find, a generation of Americans not willing to work, I found young people willing to work, if people are willing to take just the last bit of our own time and effort.

Burgess Owens: Although I didn't get the cross-section of participants that I probably would have in an impromptu meeting, I was impressed by the participants and the objectives of both of the programs I reviewed. Because the participants are presently being benefited by the programs, it was difficult to get any real hard-nosed criticism, even if there were any. As I mentioned earlier, in New York, where there are so many available negative alternatives, programs that mandate school attendance and give high school youngsters more exposure and experience before releasing them out into the work market, are invaluable.

Billy Johnson: I was very impressed by the way these programs are run. Many of these kids have had some setbacks in life, but they're still in there plugging. These programs will help them get back on their feet.

Mark Kellar: I have nothing but positive reactions about the programs in the Minneapolis/St. Paul area. The one thing I feel would help is a little more financial backing for the kids and the programs in general. There is so much good attitude here, so much hope and optimism, we can't let them down.

Bernard Jackson: Basically, I think the programs as such are a great incentive for youth. To be able to have assistance in the search for probably their first jobs; to be able to have some guidance as they trudge off to the job market; some experience as they fight for jobs; some confidence in themselves and their ability to be able to accomplish something. These are important little things that these jobs will mean to these youths as they grow older.

Mack Alston: At first I thought the programs would be make-work programs and a waste of taxpayers money. But after interviewing the kids and talking with some of the staff people, I think that the programs are justified and are working. I believe that if all programs are operated in the same manner, they will be more beneficial to our youth and our society.

While it is clear from the entire foregoing report that the players' observations were highly favorable, it should also be said that many of them believe more can be done to make the programs oriented to the special needs and concerns of the young people they seek to help. Benny Ricardo suggested an extended metaphor which probably would have brought agreement from most of the other player-interviews. He said:

> It's like these kids are out in the desert stumbling around, looking for water and direction. Then they suddenly stumble onto an oasis where they spend several days being nourished and refreshed. The problem with too many of them is that they are then sent back out into the desert with no more equipment or information than they had in the first place. If these programs are to work, they have to become oases that prepare the kids for surviving in the desert. And that means a comprehensive approach that includes training, counseling, education, and everything.

Interview City	Player Name(s)	Team
(Region One)		
1. Denver	Bernard Jackson Tom Jackson	Denver Broncos Denver Broncos
2. Houston	Billy Johnson	Houston Oilers
3. Oakland	Gene Upshaw	Oakland Raiders
4. San Diego	Benny Ricardo Efren Herrera	Detroit Lions Seattle Seahawks
5. Dallas	Doug Dennison	Dallas Cowboys
(Region Two)		
6. Chicago	Dennis Lick	Chicago Bears
7. Cleveland	Gerald Irons	Cleveland Browns
8. Detroit	Charles Weaver Freddie Scott	Detroit Lions Detroit Lions
9. Minneapolis	Mark Kellar	Minnesota Vikings
10. St. Louis	Mark Arneson Mike Wood	St. Louis Cardinals Baltimore Colts
11. Atlanta	Mel Pender	(Former track star)
(Region Three)		
12. Baltimore	Mack Alston Harold McLinton	Baltimore Colts Washington Redskins
13. New York	Burgess Owens Luther Bradley	New York Jets Detroit Lions
14. Miami	Leroy Harris	Miami Dolphins
15. Boston	Tony McGee Richard Bishop	New England Patriots New England Patriots
16. Philadelphia	Dennis Harrison	Philadelphia Eagles

Appendix 1

What do you think are the best things about the program? (Verbatim Comments)

Female, 16, Houston: Meeting new people.

Male, 19, San Diego: Learning to do the work I always wanted to do.

Male, 15, Cleveland: Learning how to deal with people.

Male, 17, Dallas: Teachers are more precise in teaching; teachers seem more responsive.

Female, 20, Oakland: Learning skills; very pleased with program; better than high school; teacher very concerned about students.

Female, 18, St. Paul: The people I work with; communication and assistance from others.

Female, 16, Miami: You meet lots of people.

Male, 17, San Diego: They help you to learn something for your future. It's more like an experience, not a job.

Male, 18, Atlanta: The experience; learning to control my temper.

Male, 17, Baltimore: The teachers, they seem to care about us.

Male, 18, Philadelphia: The fact that this job taught me a skill while I earned money, and helped me to become a better employee when I leave the program.

Male, 16, Cleveland: I'm getting good experience about jobs, and learning how to go on interviews, fill out job applications, resumes, etc.

Female, 16, Detroit: Good training; instructors helpful and friendly; rules and discipline.

Female, 17, New York: Helps to reinforce the belief that medicine is the right course for me. I have been able to build good relations with doctors and nurses.

Male, 19, New York: I'm learning a skill first-hand.

Male, 20, St. Paul: Learning and experience in the things that we do.

Female, 16, Detroit: Great experience for firefighting; discipline.

Female, 18, Denver: Responsibility of work and learning to speak English.

Male, 19, New York: Responsibility; have been able to gain confidence; working teaches me to make responsible decisions.

Male, 19, Denver: Learning about auto parts.

Female, 16, Oakland: Help in career; points out skills; helps with all the basic skills in getting a job.

Male, 18, Detroit: Changed my personality and created self-respect. The dressing code makes me look presentable and feel like a better person. I save money so I can look good every day.

Male, 17, Boston: Getting ready for life; learning to live and function in society in a job situation.

Male, 15, Cleveland: Learning more about my heritage and how an office works.

Female, 19, Boston: Job experience and working with many types of people; counselors really care.

Male, 19, Houston: I work at my own pace and talk about problems that arise; people treat you fair.

Male, 20, St. Louis: Feeling you get from helping somebody.

Male, 19, Miami: Great opportunity to find out what I want out of life.

Female, 18, St. Louis: The program builds confidence in oneself.

Male, 18, Philadelphia: You get to really find out what it's like working in a career job.

Female, 19, Denver: Guarantee of a job, therefore, a paycheck.

Male, 15, Atlanta: You make money over the summer.

Male, 17, Philadelphia: You really get a chance to learn about what's waiting for you out in the world.

Male, 20, Philadelphia: You can work and learn; you'll also receive a paycheck.

Male, 17, Philadelphia: The best thing about this program is that we are learning how to choose, find, and maintain jobs.

Male, 19, Denver: Payday!

Female, 18, Boston: You really get to know and understand how the working world is.

Female, 19, Oakland: Teachers are helpful; they take as much time as necessary to teach.

Female, 22, Oakland: Teachers are very interested in my future.

Male, 15, Cleveland: Working together with people, and the feeling of trust towards the supervisors.

YOUTH DIFFERENTIALS TO THE MINIMUM WAGE:

A SUMMARY OF THE ARGUMENTS

Terence Kelly
Vice President's Task Force
on Youth Employment

The Youth Subminimum Concept

The idea of a subminimum wage to compensate for presumed lower productivity among youthful job seekers is a controversial policy issue. Although the Carter Administration has consistently opposed the subminimum wage, passage failed in the Congress by only one vote in the last go-around.

Opinions about the desirability of subminimum wages for youth are strongly felt--somewhat unnecessarily so, it would appear from the evidence. The essence of the subminimum debate can be stated simply. At one extreme there are those who believe that subminimum will undermine a useful policy tool (the FLSA); at the other, those who feel that the minimum wage itself is inefficient in achieving its objectives, and that undesireable side effects can at least be minimized through such amendments as a subminimum for youth. In support of youth differentials, it is contended that new labor market entrants are perceived by employers to have lower productivity than more experienced workers, or at least that the young are more "risky" hires. To offset this productivity/risk differential, to equalize access to the labor market between young and old, it is felt that youth should be allowed to offer their services at lower cost to employers than adults. By extension, this argues for a youth subminimum wage.

It is frequently observed that there are two reasons why a debate over the merits of a subminimum might be considered purely hypothetical. First, there already exists a provision in the Fair Labor Standards Act which amounts to a 15 percent youth differential for full-time students, apprentices, learners and messengers in retail or service establishments or in agriculture. Second, there is evidence that large numbers of people do not get paid the minimum, either because of noncoverage or because of out and out noncompliance. Both points suggest that a formal youth differential may not be necessary--although neither observation is overly convincing.

According to DOL's Employment Standards Administration, more than 700,000 young workers were granted certificates allowing them to work at wages below the prevailing minimum of 1976.[1] The evidence suggests that the existence of this subminimum provision is not widely known by employers or by youth. In any event, the provision does not apply to the hard core youth unemployed who have dropped out of school and have trouble entering apprenticeship systems. For these reasons, learners exemptions are a far cry from a universal subminimum for youth.

[1] U.S. Department of Labor, Minimum Wages and Minimum Hours Standards Under the Fair Labor Standards Act, Washington, D.C., 1977.

Penalties for violating the FLSA are nonpunitive; consequently violators are assessed only the amount of back pay necessary to raise individual earnings to the level of the prevailing minimum.[1] There is therefore every incentive for employers to avoid payment of the minimum wage for as long as possible and substantial evidence that such avoidance is significant. Analysis of wage distributions shows large numbers of people earning less than the minimum wage, far more than the current 15 percent who are not covered by its provisions.[2] Smith and Ashenfelter have presented estimates indicating that noncompliance may reach as high as 30 percent.[3] While all such estimates must be rough, it seems safe to say that noncompliance is fairly widespread.

This having been said, it may be questioned whether violations of the FLSA have anything to do with the desirability of a youth differential. Failure to legislate change on the basis of presumed violation of the law has no more appeal to jurisprudence than to common sense. It could in fact be argued that a youth differential would legalize existing practice and thereby reduce noncompliance. All in all, neither the existence of a subminimum provision for learners nor noncompliance practices can be viewed as satisfactory substitutes for a general subminimum wage for youth. This does not prejudge the issue, but merely indicates that other arguments should be evaluated.

The Arguments

The debate over the youth differential can be framed around five key policy issues:

- The effect of minimum wages or differentials to them on youth employment.
- Possible displacement of adults due to competition from low wage youth should a differential be legislated.
- The effects of minima or differentials on the income distribution.

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[1] In fact, most violations are for failure to pay stipulated overtime rather than for failure to pay the basic minimum; that is, violations are for hours, not basic wages.

[2] Minimum wage coverage now amounts to about 85 percent of the work force.

[3] Orly Ashenfelter and Robert Smith, "Compliance with the Minimum Wage Law," U.S. Department of Labor, Office of Evaluation, Technical Paper No. 19A, April 1974.

- The cost of alternative policies in terms of the public budget.

- Obstacles to introducing any changes in minimum wage legislation, no matter how well conceived. These are the transitional costs of policy change. In the case of minimum wage, these transitional costs, primarily political, are likely perceived to be high.

Arguments for or against differentials are not merely the converse of arguments about the minimum wage itself. One could oppose both minimum wages and differentials to them without loss of consistency, since differentials favor specific groups while the minimum applies to labor as a class. Determining the advisability of differentials to a given minimum wage is therefore considerably more complicated than determining the advisability of the minimum wage itself.

1. Likley effects of differentials on youth employment. Most discussions of the employment effects of minimum wages (and by extension of differentials) begin with a perfunctory statement about how empirical results on the issue are unclear. The fact is that the evidence is at least as substantial on this as on most policy issues and recent results are converging to consistency. Increases in the minimum relative to average wages have significant but small negative effects on youth employment. It has been estimated, for example, that the 1979 minimum wage increase cost teenagers about 90,000 jobs, or a 1 percentage point rise in their unemployment rate.[1] Gramlich has found that the minimum wage both reduces full-time employment for the young and forces many into part-time employment.[2] Similarly, Welch has found that the minimum wage causes young people to move into cyclically unstable industries or occupations, with a new decrease in employment and an increase in their unemployment.[3] Since blacks are at the end of the hiring queue, wage rigidities are likely more detrimental for them than for others.[4] It should be noted that the relative deterioration in black youth employment/population ratios since 1975 coincides with their move away from uncovered employment (primarily agriculture) into industries covered by the minimum wage provisions.

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[1] U.S. Department of Labor, "Universe of Need," page 16.

[2] Edward Gramlich, "Impact of Minimum Wages on Other Wages, Employment and Family Incomes," Brookings Papers on Economic Activity, 2, 1976, pp. 409-461.

[3] Finis Welch, "Minimum Wage Legislation in the United States, Economic Inquiry, Volume 12, No. 3, September 1974.

[4] One estimate, for example, indicates that the 1967 minimum wage amendments reduced black teenage employment by 12 percent and that for whites by 9 percent. T.F. Kelly, "The Minimum Wage and Youth Employment" An Econometric Model of Occupational Choice," Working Paper 3608-1, The Urban Institute, 1975.

It has been mentioned that these disemployment effects, while significant, are small. Although estimates vary, the employment elasticity appears to be about -0.4; thus, a one percentage drop in the minimum wage can be expected to increase youth employment by 0.4 percent.[1] In terms of a differential of 15 percent, youth employment should rise by about 6 percent.

Critics of the idea of a youth differential contend that in the worst of times, the employment effect is likely to be small and in the best of times a subminimum may not be needed. If entry level wages rise faster than the minimum due to an excess demand for youth labor, then a differential becomes unnecessary. And the 1980's may be just the time when these conditions exist due to the expected relative decline in the size of the youth population. Consequently, it is argued that whatever one thinks about a differential, now is simply the wrong time to introduce one.

Finally, employment effects depend on labor supply responses as well as demand. It is frequently alleged (without substantive evidence) that many youth simply would refuse to accept jobs paying less than the minimum wage. This may be true for some youth but evidence from the YEDPA experience suggests that many of the young are more than willing to work for reduced wages.

2. Displacement. Whatever the direct positive employment effects of a youth differential, there is a danger that they could be gained at the expense of adults. With demand constant, an increase in the employment of one group can only come at the expense of other groups--black males in central cities or mature females, for example. The question is how large can this displacement be expected to be.

There is even less empirical evidence on displacement than on direct employment effects. Hamermesh has unpublished data indicating that substitution possibilities between youth and adults are low, but these data are too aggregative to settle the question. The House Budget Committee has noted that in those nations which have a youth differential there is no substitution at the expense of older workers, but there is really no evidence in support of this contention.

[1] D. Hamermesh, "Econometric Studies of Labor Demand and Their Application to Policy Analysis," Journal of Human Resources, II, Fall 1976.

In looking to the 1980's, it is well to ask just how far youth can be substituted for adults in any case. The relative scarcity of young people due to the expected demographic developments will limit substitution possibilities, but much depends on future patterns of demand which, from the current vantage point, appear unfavorable. It is thus possible that some youth could gain at the expense of some mature job seekers, even while large-scale displacement would not be expected.

3. Income Effects. One of the avowed purposes of minimum wages is to improve the income distribution, or at least to shelter that distribution from the vagaries of the business cycle. They do this, in theory at least, by truncating the wage distribution at the lower end--it is stipulated that pay must be at least as great as the desired minimum.

Traditionally, minimum wages have never been set high enough to generate earnings above the poverty level, even for year-round full-time workers. Not surprisingly, therefore, there is evidence that the poverty effectiveness of minimum wages is low.[1] What *is* surprising is that the poor are underrepresented in the receipt of the minimum wage. Put another way, most low wage workers are from nonpoor families--students and secondary family earners. This being the case, one would be hard pressed to argue that a youth differential could seriously distort the income distribution except to the extent that wages above the minimum would be held down by a youth differential (and this, of course, would be anti-inflationary).

Perhaps the best way to put the matter is to say that those youth who are willing to work for subminimum wages are presumably making an investment in their own human capital. They are trading off current wages for work experience with the expectation that this will enhance future employability or earnings. The welfare implications of differentials in this case are more likely positive than negative.

4. Public Costs. One of the most attractive features about minimum wages and differentials is that their costs do not show up in public budgets. They are ultimately borne by consumers if the added wage costs are shifted forward in the form of higher prices, and by the unemployed if shifted backward in the form of reduced employment probabilities, but they are not a direct government budgetary cost. They are hidden even though no less real.

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[1] Edward Gramlich, *op. cit.*, T.F. Kelly, *op. cit.*

An alternative approach would be to offset presumed disemployment effects with targeted wage subsidy or public employment programs, rather than with the use of a differential. A differential is gross, applying to all youth so its social costs are likely higher than a more selective subsidy, such as the targeted tax credit, or targeted exemptions. Nonetheless, there is strong political appeal to regulations in place of programs which show up in the public budget.

5. Obstacles to introducing a youth differential. Even those who are persuaded by the arguments in favor of a youth differential admit of the serious political consequences of attempting to introduce one. The most vocal opposition comes from organized labor, which argues that a differential would erode the minimum which puts a floor on the wage distribution and provides a point of reference for union wage settlements. They also stress that no person should be forced--in fact, even allowed--to work at below a "living" wage.

There is no compensatory organized group lobbying in favor of a youth differential, but there are many who are willing to credit the minimum wage with an inordinate number of our economic evils and who in consequence are in favor of any exceptions to reduce the social costs. In terms of macroeconomic effects, minimum wages are inherently inflationary and they reduce the capacity of labor markets to adjust to economic downturns. Given a somewhat rigid system of hiring and firing due to such institutional elements as seniority provisions and employee resistance to layoffs, unit labor costs increase over what they would otherwise be which is inflationary. This provides an incentive for capital intensive production which is ultimately harmful to employment.

In response, it may be noted that these macroeconomic effects are likely to be small. The minimum wage probably does not cost all that much because it probably does not do all that much. In any event, such effects are not likely to be offset by a youth differential which, after all, is likely to be 25 percent at the outset and to apply to only a small portion of the total work force. Finally, the existence of a youth differential may be used by some as an excuse to increase the minimum wage faster over time. Once the young are supposedly protected by a differential, it might be argued that the disemployment effect of higher minima will be small in which event we can then "afford" more rapid increases.

A more damaging argument against a youth differential is the fact that its benefits initially accrue primarily to the secondary labor market. Low wage labor intensive industries would receive a windfall profit from any youth differential and real questions can be raised as to whether this is a political constituency to be cultivated at the expense of union votes.

Subjective Evaluation of the Arguments

One must pick and choose among a wide array of competing arguments to decide whether to be for or against youth differentials. Everything depends on one's subjective evaluation of the trade-offs--between the needs of youth and the needs of older workers, between equity and efficiency. On balance, however, the negatives appear to outweigh or at least balance the positives:

First, there are already more efficient tools in place to achieve the purported objectives of a youth differential--the targeted tax credit and, to a lesser extent, exemptions for students and learners. If desired, these regulations could be augmented with extension of subminima exemptions to YEDPA participants, thereby partially avoiding political battles and certainly achieving a more effectively targeted program.

Second, due to expected declines in the relative number of young people entering the labor market in the 1980's (and the concomitant bulge in the number of aged), now is simply not the time for a youth differential. The year 1969 might have been a useful time to introduce a youth subminimum but not 1979. The hope for positive effects of a subminimum will probably be lower in the 1980's, and potential displacement effects probably larger.

Third, the political consequences of advocating a youth differential are likely to be high, perhaps even undermining consensus on a number of other youth employment policies. Minimum wage increases may harm employment prospects for youth. However, the differential may do more harm than good if it erodes support for more constructive youth employment measures.

PART-TIME EMPLOYMENT OF IN-SCHOOL YOUTH: A PRELIMINARY ASSESSMENT OF COSTS AND BENEFITS

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Introduction

There has been a dramatic increase in the proportion of in-school youngsters who work and in their hours of work. In 1940, the year that the Bureau of the Census first started reporting employment figures separately for in- and out-of-school teenagers, only 4% of all in-school, 16-year-old males and 1% of in-school, 16-year-old females held jobs. By 1970 these figures had increased to 27% and 16%, respectively--a seven-fold increase for males and a sixteen-fold increase for females. Part-time employment of 14-and 15-year-olds also has increased over this period of time. In 1940 only 2% of in-school 14-year-old males and 1% of females worked; by 1979, these figures had risen to 11% and 5%, respectively -- approximately a five-fold increase for both sexes. For in-school 15-year-olds in 1940, the labor force participation was 3% for males and 1% for females; in 1970, 15% for males and 7% for females, an increase of the same magnitude as for 14-year-olds.

The increased intensity of participation in the part-time labor force can also be demonstrated. In 1960, 44% of all in-school 16-year-old employed males worked more than 14 hours per week, compared to 56% in 1970. Among 16-year-old employed females, the comparable figures are 34% and 46%. Fourteen-and fifteen-year-olds also have shown a pattern of increased employment. The proportion of 14-and 15-year-old males working more than 14 hours per week increased by 33% during the 1960's; for females, the size of the increase was 40%.

These trends raise significant policy issues:

(1) Do youngsters who have had part-time employment before leaving school have greater success in obtaining and holding full-time jobs when they leave school?

(2) Does part-time job experience during the school years selectively improve the future employment prospects of minority youth?

(3) Does the availability of part-time work for in-school youngsters reduce the availability of full-time jobs for out-of-school youth?

(4) What are the costs and benefits to youngsters of part-time employment during the in-school years?

The first two questions have been explored in a few studies based on the data from the National Longitudinal Surveys (Parnes, 1974; viz. Stevenson, 1978). It is difficult to draw clear conclusions from these studies, and more research is obviously needed. The effect of early employment on adult employability and earnings is different for high school drop-outs than it is for high school graduates; different for males than females; and different for whites and minority youngsters.

As far as we know, there has been no research on the third question, which concerns the impact of part-time jobs for in-school youth on the availability of full-time jobs for out-of-school youth.

The fourth question is of particular interest to critics of the school as an institution for the education and socialization of adolescents. Within the past decade a number of respected social critics have argued forcefully that we should look to the work-place as a complement, or even an alternative, to the high school (e.g., Illich, 1971; the President's Science Advisory Committee, 1974). Accordingly, The President's Science Advisory Committee (1974) recommended removal of structural constraints on employment of the young, and the National Panel on High Schools and Adolescent Education recommended more flexible school schedules in order to promote youngsters' employment. They and other commentators have suggested that early experience in the workplace would enhance the integration of youth into the larger society, promote the development of independence and social responsibility, and provide an alternative to the school in which cognitive skills could be acquired.

Surprisingly, such notions have not been subjected to extensive empirical tests. In a report prepared for the Federal Government's Interagency Panel for Research and Development on Adolescence (1973), the authors conclude an exhaustive review of federally sponsored research on work experience programs with the following observation:

> Perhaps the most significant question...is whether actual experience in a real working situation promotes social---development beyond that which classroom learning can provide. This question has not yet been answered and few of the studies reviewed are attempting to answer it... (p. 206).

An Assessment of School/Work Relationships

In September 1978, the authors of this Report began a two-year study which addresses the costs and benefits of early work experience in the part-time labor force, including impacts on (a) school attendance, attitudes toward school, academic performance, and future educational plans; (b) knowledge of business practices, consumer issues, money management, and consumer mathematics; (c) attitudes toward working; (d) health; and (e) the incidence of antisocial behavior.

Data have been collected from a subsample of 531 10th and 11th graders in Orange County, California. This subsample was drawn from a pool of 3,100 young respondents who participated in a survey regarding their employment histories and family background characteristics. The 3,100 students were the entire 10th and 11th grades present on the testing days at four high schools. The four high schools selected provide a heterogeneous sample of Orange County students with respect to social class and ethnicity.

Important characteristics of the sample of 531 youngsters are presented below, with special attention to comparison of those who work and those who do not work.

Table 1 shows the sex composition of the sample and the distribution of workers and non-working by sex. Statistical analysis reveals that there is a significantly higher proportion of boys than girls in our subsample of workers ($p < .03$).

Table 1

Composition of Sample by Sex

	Sample %	Workers %	Non-Workers %
Male	42.6	48.6	38.6
Female	57.4	51.4	61.4

Table 2 shows the ethnic composition of the sample. Statistical analysis reveals significant ($p < .03$) ethnic differences in the likelihood of being a worker -- diferences which favor whites and Hispanics. When individuals other than whites and Hispanics (of whom most are Asians) are removed from the analysis, there are no differences by ethnicity in who comprises the in-school, part-time work force.

Table 2

Composition of Sample by Ethnicity

	Sample %	Workers %	Non-Workers %
White	82.2	85.4	80.0
Hispanic	9.7	10.4	9.2
Other	8.1	4.3	10.8

Table 3 shows the composition of the sample by grade level and reveals a higher proportion of "older" than "younger" adolescents -- i.e., 11th graders than 10th graders -- in the part-time labor force. This grade-level difference is statistically significant ($p < .001$) and probably reflects, among other factors, structural constraints against hiring younger workers.

Table 3

Composition of Sample by Grade Level

	Sample %	Workers %	Non-Workers %
Grade 10	42.5	34.0	48.9
Grade 11	57.1	66.0	51.1

Statistical analyses reveal that father's educational attainment and occupational status are unrelated to whether youngsters are or are not working. Nor are these family social class indicators related to differences in the number of hours per week that youngsters work.

Table 4 shows the types of jobs in which the subsample of workers are employed. Jobs were coded according to U.S. census categories and grouped into 13 job types. Only three types of occupations -- food service, manual labor, and retail and cashier positions -- account for over 60% of all jobs held by 10th and 11th graders in our sample.

Table 4

Distribution of Part-Time, Adolescent Emplcyees by Job Type

	Percent of Workers Employed in Occupation	Percent of Workers Employed in Occupation (Rank Ordered)
Food Service	34.9	1
Retail Sales & Cashier	12.9	3
Clerical	9.1	5
Manual Labor	14.4	2
Skilled Labor	1.0	11.5
Operatives	6.2	6
Cleaners	9.6	4
Child Care	2.4	9
Newspaper Deliverers	1.9	10
Hucksters	2.9	8
Health Aides	1.0	11.5
Educational Aides	.5	13
Recreation Aides/ Ushers	3.3	7

Of the 531 persons in the final study sample, 212 were selected because they were currently holding their first paid job, and 319 youngsters were selected for comparison because they had never worked. It should be underscored that all 531 young persons in this study were attending high school full-time.

Work was defined as any job or service that:

(1) is performed in return for financial renumeration;

(2) is performed for an employer who is not a member of the adolescent's immediate family or an organization in which the adolescent's immediate supervisor is not a member of his or her immediate family;

(3) is performed for at least three hours each week;

(4) is performed on a regular basis, and;

(5) is performed consistently for the same employer.

Findings

Our findings to date are based on a cross-sectional comparison of workers and non-workers at one point in time. In this type of design, it is not possible to clearly separate differences between workers and non-workers which are due to selection into the work force from differences between them which are due to the experience of working, but the differences provide important leads:

1. School Attendance

Workers are significantly more likely than non-workers to be absent from school ($\underline{p} < .02$). It is not clear, however, whether higher absenteeism is a result of working or, instead, whether youngsters with higher rates of school absence are more inclined to work. A comparison of unemployed youngsters presently seeking jobs with unemployed youngsters who are not interested in obtaining jobs shows no difference in rates of school absence. This finding supports the interpretation that working leads to higher school absenteeism.

Intensity of employment (i.e., number of hours of work per week) is not significantly related to school absence, however, suggesting that it is whether a youngster works, and not how much, that is related to school absenteeism.

Youngsters who work are absent from school more often than they are absent from work. Workers, in general, report that they seldom miss work: 94.3% mark "almost never" or "a few days a year", whereas only 65.4% report similarly few absences from school.

2. Attitudes Toward School

The higher rate of absence of the group of youngsters who select into the part-time work force suggests that they may find school a less gratifying environment than youngsters who do not go to work. Several types of data are available to test this possibility. Respondents were asked "how much do you enjoy going to school?" and replied on a four-point scale. Additionally, they indicated how difficult it was, at school and at work, to satisfy eight needs of potential importance to adolescents: helping others, having influence over others, learning new things, making their own decisions, getting to know people better, doing a variety of things, doing things they are good at, and earning money. Finally, workers were asked if they would like to work more hours, attend school more hours, or keep their present balance of school and work intact.

Workers are more likely than non-workers to report that they do not enjoy school a lot ($p < .001$). Moreover, the more hours per week they work, the less likely teenagers are to say that they like school ($p < .04$). The relationship of intensity of employment to enjoyment of school is not linear, however. In particular, there is a noticeable subgroup of adolescents who work very long hours (25-40) who are among the youngsters who most enjoy school. The fact that currently unemployed job-seekers enjoy school as much as those not looking for work suggests, however, that dissatisfaction with school does *not* play a major role in motivating teenagers to work.

On six of the eight needs noted above, workers and non-workers do not differ in their ratings of how much the school setting facilitates need satisfaction. However, workers are significantly less likely to say that the school setting is a place where it is easy to do things at which they are competent ($p < .02$). Does this mean that the perception that school does not evoke one's competencies *leads* youngsters to work? Comparison of job-seekers and non-seekers suggests that this is not the case, since the two groups do not differ in this aspect of their perception of school. We suspect, then, that it is *after* an adolescent begins to work that the individual forms a belief that the school environment does not permit the expression of his or her abilities. Turning to the other item on which workers and non-workers differ, we found, curiously, that the former find it easier than the latter to make money at school. Workers' perceptions of the school environment in terms of need satisfaction do not vary as a function of the number of hours they spend in the workplace.

In comparing the degree of need-satisfaction at school with that at work, adolescents who work report that they are more able to help others ($p < .001$), meet the other people (p .04), and of course, earn money ($p < .0001$) at work than at school; but that they are more able to learn new things and make their own decisions ($p < .05$) at school. There is a nonsignificant trend favoring school over work as a setting in which one can do a variety of things ($p < .08$). Intensity of employment is related only to perceived opportunity to engage in a variety of tasks ($p < .02$). Although the pattern is not strictly linear, it implies that teenagers who work long hours (especially 20 hours and up) feel that they do more different kinds of things on the job than those who spend more limited hours at work.

It is worth underscoring that workers do *not* describe the work setting significantly differently from the school setting as an arena in which they can do things at which they feel competent. Data based on another item in the questionnaire support this observation. Asked directly whether they are able to use their skills and abilities at work, 55.5% agree (and of them, 12.3% strongly agree), but 45% disagree (and of these, 9% strongly).

Workers were asked if they would prefer to (a) spend less time at school and more time working, (b) work less and spend more time at school, or (c) continue to spend the same amount of time at school and work as they do at present. 33% chose option (a), 57%, option (b) and 10%, option (c). There were no significant differences among youngsters as a function of intensity of employment.

3. School Performance

The fact that workers feel less able than non-workers to express their competencies in school suggests that the two groups of youngsters may differ in the way their academic performance has been evaluated.

Workers obtain significantly lower grade-point averages (GPA) than non-workers ($p < .04$). It appears that differences in GPA are a consequence of working, rather than a factor explaining differential selection into the work force, since job-seekers and non-seekers do not differ from each other in GPA. Consistent with this interpretation, 27.4% of our working youngsters report a decline in academic performance since beginning to work, whereas only 16.5% report an improvement. The relationship between GPA and the nature of the change (if any) in GPA is not statistically significant (p .10), but the trend is for work to have a negative impact on the grades of the academically less able.

Intensity of employment is also significantly and negatively associated with academic success ($p < .001$). Those students who work long hours do more poorly in school. To illustrate, consider these figures: 81% of A and B students work fewer than 15 hours per week compared to 25% of C and D students; and 33% of A and B students work more than 20 hours per week, in contrast to 54% of youngsters with C and D averages.

There is also a trend for longer hours of work to be associated with a drop in students' grades after they begin to work. However, the relationship is not linear until we reach the group which works 20-24 hours per week, from which point onward more hours of work take a clearer and clearer toll on academic performance.

It stands to reason that the strong trend noted above may reflect differences in the amount of studying and homework done by youngsters who work many hours as opposed to few hours a week. The data lend some support to this common-sense notion. Workers and non-workers do not differ in self-reported hours of study and homework, but there is a strong trend showing that teenagers who work many hours put in less time studying than their peers with less intensive work commitments. The association between intensity of employment and amount of study-time is particularly strong among youngsters who work very long hours (25 hours or more per week).

4. Educational Expectations

In view of the findings that workers enjoy school somewhat less, overall, than non-workers and that with increasing intensity of employment grades go down, we may wonder whether the part-time employment of youngsters is related to lower levels of expected educational attainment beyond high school. Work status per se (working versus not working) is unrelated to educational expectations, although the trend is in the direction just suggested. However, intensity of employment is significantly and negatively related to educational plans ($p < .04$). To illustrate the point: none of the youngsters who work less than 3-9 hours expect to end their education with business or trade school after graduation from high school, whereas 28% of the youngsters who work 25 hours or more per week have this expectation.

5. Learning on the Job

We constructed measures of each of four forms of "literacy," as follows:

Our measure of business knowledge assesses understanding of basic business and economic concepts. Our measure of consumer knowledge assesses understanding of factors involved in the informed consumption of goods and services. Our measure of money knowledge assesses understanding of the rudiments of managing one's personal finances. A related measure of consumer mathematics assesses fundamental arithmetic skills which are called for in various consumer transactions.

Because students who scored better on the non-traditional measures of literacy were those with high GPA's, GPA was used as a covariate in analyses of the relatonship of work status and employment intensity to scores on the four tests. In these analyses, workers scored significantly higher than non-workers on business knowledge ($p < .02$), money knowledge ($p < .01$), and consumer mathematics ($p < .001$). There were no differences between the groups on consumer knowledge. The association between working and scores on three of the four types of literacy are especially marked for poorer students. Differences in hours of employment were unrelated to workers' scores on any of the four measures of knowledge.

Because work status was so clearly associated with increased scores in these areas of literacy, we once again raised the question, are literacy variables among the factors that explain selection into the work force? Or are these types of literacy consequences of working? The performance of unemployed youngsters who reported that they are looking for jobs -- i.e., job seekers -- was compared with the performance of youngsters who are not seeking jobs.

Using GPA as a covariate, we found no differences in the average literacy scores of job-seekers and non-seekers. It appears, then, that the kinds of literacy we tested are not, per se, causes of selection into the part-time labor force but that working in fact may promote the acquisition of certain types of knowledge.

6. Attitudinal Variables

In addition to the acquisition of business, consumer and money knowledge, it is also possible that working selects for and/or develops in students a number of attitudinal variables. On the positive side of the ledger we may ask, does employment select for and/or develop in teenagers a "work orientation"? The individual with a work orientation has been described as one who has a general set of skills that are useful across a range of jobs, takes pleasure in work, and has standards for him- or herself for performing tasks competently (Greenberger and Sorensen, 1973). On the negative side of the ledger, does work select for, or promote, materialistic attitudes? It is possible that youngsters who decide to get jobs have a greater interest in material acquisitions than their peers who do not take on work during the in-school years. Or, on the other hand, it is conceivable that early experience with having money of one's own makes youngsters more interested in the consumption of goods.

Our measure of work orientation is a subscale of the Psychosocial Maturity Inventory devised by Greenberger and described in Greenberger et al. (1974). Sample items, which respondents answered on a four-point scale of agreement to disagreement are:

(a) When a job turns out to be much harder than I was told it would be, I don't feel I have to do it perfectly.

(b) I often don't finish work I start.

The mature direction of response to both (a) and (b) is "disagree". The materialism scale, devised by Ruggiero as part of the N.I.E.-funded research project, includes the following items, among others. These items also are answered on a four-point scale of agreement to disagreement:

(a) My goal in life is to make a lot of money and buy a lot of things.

(b) Money burns a hole in my pocket; if I have it, I spend it.

The materialistic direction of response is "agree."

Workers score significantly higher than non-workers on the measure of work orientation ($p < .01$), even after we have controlled statistically for sex, ethnicity, and father's occupational status. (The statistical test here and in the subsequent analysis was a four-way analysis of variance.) Furthermore, job seekers and non-seekers do not differ with regard to work orientation, which suggests that this attribute may be enhanced by experience in the workplace. Intensity of employment is unrelated to scores on the Work Orientation subscale.

7. Measures of Health

In-school youth attend school on the order of 30 hours a week and many spend additional time studying. It is possible that holding a job for additional hours, and especially intensive employment during the school year, exacts health costs from the 15- and 16-year-olds in our sample.

Respondents indicated the frequency with which they had experienced a variety of symptoms that have implications for health and well-being. The list of symptoms was subsequently factor-analyzed and yielded a Physical Health factor, consisting of the incidence of headaches, stomach aches and colds; and a Psychological Health factor, consisting of the incidence of nervousness, tension, depression, and feeling of loneliness. Workers did not differ from non-workers in their scores on the psychological health factor, but reported fewer health problems (p .01). Since job seekers and non-seekers did not differ in reported health problems, it may be the case that working has a positive effect on teenagers' physical health. Variation in intensity of employment among the group of working youngsters was unrelated to physical or psychological symptomatology.

In addition to these aspects of health, we questioned whether workers simply felt overtired more often than non-workers, and whether longer hours of work were associated with increased reporting of fatigue. The data reveal none of the expected differences on this dimension of well-being.

8. Measures of Delinquency

A good deal of the literature on juvenile deliquency suggests that youngsters who work have less opportunity for delinquent behavior and/or less need to obtain goods through illicit means.

Workers and non-workers were compared with respect to self-reported delinquency at school and on the street, exclusive of delinquency that involves the use of money. Examples include purposely damaging school property, cheating on a school test, driving a car without a license, taking something that belonged to someone else, participating in a gang fight. There are no significant differences between workers and non-workers on these types of delinquency.

Seven items on the delinquency measure involved buying illegal goods. On three of these items -- buying marijuana, buying other drugs, and buying liquor, workers exceeded non-workers ($p < .01$, p .06, $p < .001$, respectively). On the remaining items, most of them seldom checked by our respondents (e.g., buying a weapon or phony ID card), the pattern of workers exceeding non-workers was observed but differences were non-significant. Statistically significant differences between workers and non-workers on all items remained after controlling for family socioeconomic status and ethnicity.

On two related items involving the use of (but not specifically the *purchase* of) illegal substances, workers once more report significantly higher frequencies. These items concern the use of marijuana and alcohol (p .0001 and $p < .01$, respectively). Use of drugs other than marijuana shows a trend ($p < .07$) consistent with the other data: i.e., workers exceed non-workers. Job seekers do not differ from non-seekers on these or the afore-mentioned items. Consequently, it appears that factors associated with working *leads to* increased involvement with drugs and alcohol. We think it highly plausible that earning money and having relative privacy in relation to how one spends it are major factors that account for this finding. Interestingly, neither intensity of employment nor amount of money earned per week is significantly related to delinquency with money.

Conclusions

The recommendations which follow draw on conceptual issues related in adolescence, school, and work, and on data from the study we have described in detail. Before going further, we wish to call attention to limitations of that study.

First, although our sample is representative of the population in Orange County, this region is by no means one which is representative of the country as a whole. Our sample has a higher proportion of whites, a lower proportion of blacks, and a lower proportion of adolescents from families of low socioeconomic status than would a representative national sample.

Second, the types of jobs available to youngsters in Orange County and the distribution of workers across these jobs reflects the suburban nature of the region. For example, proportionately fewer adolescents in our sample work in farming and manufacturing than we would expect to find in a national sample.

Third, as we noted earlier, the cross-sectional design of the study does not permit casual inferences to be drawn. We have partially overcome this limitation: by comparing unemployed youngsters who are looking for jobs with those not seeking employment, we are able to note those factors which are more related to selection into the workplace than to the effects of working. A longitudinal extension of the present study is in progress and will clarify this issue further.

Finally, the findings are based primarily on self-report data. As we need hardly elaborate here, such data have both strengths and weaknesses.

What important conclusions can we draw from the present study?

(1) The investment of time in working may reduce a young person's investment in high school. This reduced investment is seen in declines in school attendance, grade point average and enjoyment of school. Academic performance and time spent on studies suffer most when youngsters work 25 hours a week or more. These findings suggest that working may interfere with schooling. Whether this interference has either short- or long-term costs is an open question.

(2) One of the possible long-term costs of early exposure to working (and the rewards of making money) may be a lowering of educational aspirations. Since we know that level of educational attainment is related to adult occupational success, this issue is of more than passing interest. Longitudinal research is necessary to determine whether the negative relationship between hours spent working and educational aspirations found in the present study is actually a result of working or due to other factors.

(3) Despite its possible costs to formal schooling, working may promote the acquisition of certain types of practical knowledge. Specifically, it appears that as a result of working, young people learn about business operations, money management, and consumer arithmetic. This suggests that early working facilitates the learning of general information which may help young people make the transition from school to work and from adolescence to adulthood. The search for other learning outcomes of early experience in the labor force should be expanded.

(4) With regard to grade point average, on the one hand, and the acquisition of knowledge about business, money, and consumer arithmetic on the other hand, costs and benefits of working appear to be accentuated for youngsters with the poorest school performance. Their academic performance is especially likely to suffer, but their gains in practical areas are likely to be the greatest. If one accepts the premise that each youngster should attain the highest level of academic achievement possible, then one would be concerned about the possible effects of these youngsters' employment. On the other hand, if one accepts the premise that some youngsters are not going to be very successful in school, then the investment of these youngsters in work, with its attendant learning outcomes, may be all to the good.

(5) Early employment seems to foster the development of positive attitudes toward working: i.e., persistence, desire for competence, and pleasure in accomplishment. The development of such attitudes, if they endure, might have benefits for productivity and personal happiness during the adult working years.

(6) The long hours that many youngsters work do not appear to have costs to mental or physical health. If anything, working has a positive impact on physical health. Many of the assumptions about the impact of work on health which underly present child labor laws may be erroneous.

(7) Work does not appear to have a deterrent effect on delinquency. Indeed, some forms of illegal behavior even may be increased as a function of working. Specifically, working youngsters are more likely than non-workers to buy, sell, and use drugs and to buy and abuse alcohol. The most obvious explanation

is that working gives youngsters the financial resources with which to buy these commodities. Money which is earned, rather than given to youngsters by their parents, tends to earn privacy: its use is not so much under the control of parents. Alternative explanations for the higher incidence of drug and alcohol use among workers are that working, alone or in combination with school attendance, is stressful; and that working may bring youngsters into contact with adults who engage in some of the same practices.

(8) For purposes of this report, we have treated work as a unidimensional variable: that is, we speak of "workers" and "non-workers." We suspect that some of the relationships we have uncovered are mediated by the type of job in which the youngster is employed. Jobs clearly differ in the degree to which they afford opportunities for learning, rewards for persistence, examples of mastery by others, and possibilities for delinquent behavior, to mention just a few dimensions of variation. Our research is now focusing on the costs and benefits of different types of employment on in-school youth. We think it is essential that researchers and policy-makers move away from simple work/non-work comparisons and begin to pay attention to variations in youngsters' work experience.

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